County

Borough of Derby.

ANNUAL REPORT

OF THE

MEDICAL OFFICER OF HEALTH,

FOR THE

YEAR 1906,

BY

William J. Howarth, M.D., D.P.H., &c.,

Medical Officer of Health, Medical Superintendent of the Borough
Isolation Hospital, and Medical Officer to the
Education Committee.

DERBY:
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PUBLIC HEALTH DEPARTMENT,
FORD STREET, DERBY,
APRIL 8TH, 1907.

TO THE

Chairman and Members of the Sanitary Committee.

GENTLEMEN,

I beg to report herewith upon the Health and Sanitary condition of the County Borough of Derby during the year 1906. This is the 30th Annual Report of the Medical Officer of Health, and the 9th which I, personally, have had the honour of making to you.

With the approval of the Education and Sanitary Committees, the Report on School Hygiene is printed herewith.

I am, Gentlemen,
Yours obediently,
WILLIAM J. HOWARTH,
MEDICAL OFFICER OF HEALTH.

County Borough of Derby.

SANITARY COMMITTEE.

Alderman R. B. CHAMBERS, Mayor.
Councillor R. LAURIE, M.D., J.P., Chairman.

Councillor ARNOLD-BEMROSE, J.P.
,, DOMLEO.
,, EATON.
,, HASLAM.
,, HEXTALL, J.P.

Councillor INNES.
,, LONGDON, J.P.
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,, NEWBOLD.
,, SIMPSON.

Hospital Sub-Committee.

Councillor EATON.
,, INNES.
,, LAURIE, M.D., J.P.

Councillor NEWLAND.
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SANITARY STAFF.

Medical Officer of Health.

WILLIAM J. HOWARTH, M.D., D.P.H., &c.

Assistant to the Medical Officer of Health.

C. J. COLEMAN, M.B., D.P.H.

Chief Sanitary Inspector.

W. WILKINSON, Certif. Sany. Inst., R.P.C.

Assistant Sanitary Inspectors.

THOMAS TURNER. W. DOLMAN, Certif. Sany. Institute.
FREDK. W. FORD, Certif. Sany. Institute.
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STEPHEN J. LAVER, Certif. Sany. Institute, R.P.C.
MISS WILKINSON, Cert. San. Insp. Board.
MISS GALLAHER, Cert. San. Insp. Board and Sany. Institute.

Health Visitor.

Nurse CASH.
By arrangement with the Derby Sanitary and Nursing Institute.

Clerks.

HENRY E. DAYKIN.
H. ROBINSON.
G. J. GLEESON.

H. COPE.
FRED. MEAKIN.

By order of the Local Government Board, dated March 23rd, 1891, Article 18, Section 14, it is prescribed that the Medical Officer of Health shall "prepare an Annual Report, to be made to the "end of December in each year, comprising a summary of the "action taking during the year for preventing the spread of "disease, and an account of the Sanitary state of his district "generally at the end of the year. The Report shall also contain an account of the enquiries which he has made as to con- "ditions injurious to health existing in his district, and of the "proceedings in which he has taken part or advised under the "Public Health Act, 1875, so far as such proceedings relate to "those conditions; and also an account of the supervision exer- "cised by him or on his advice, for Sanitary purposes over places "and houses that the Sanitary Authorities have power to "regulate, with the nature and results of any proceedings which "may have been so required and taken in respect of the same "during the year. It shall also record the action taken by him "or on his advice, during the year, in regard to offensive trades, "and to factories and workshops. The Report shall also contain "tabular statements (on forms to be suppled by the Local "Government Board, or to the like effect) of the sickness "and mortality within the district, classified according to "diseases, ages, and localities."

Under Section 132 of the Factory and Workshop Act, 1901, the Medical Officer is also required in his Annual Report to report specifically on the administration of the Factory Act in workshops and workplaces, and to send a copy of his Annual Report, or so much of it as deals with this subject, to the Secretary of State.

STATISTICAL SUMMARY, 1906.

Population estimated to the middle of 1906	Males	60,429	Total ...	123,981
	Females	63,552		
Marriages				981
Annual rate of Persons Married per 1,000 of the population				15·9
Births	Males	1,577	Total ...	3,103
	Females	1,526		
Annual rate of Births per 1,000 of the population				25·1
Deaths	Males	891	Total ...	1,733
	Females	842		
Annual rate of Mortality per 1,000	Males	14·7	Total ...	14·0
	Females	13·3		
Excess of Registered Births over Deaths				1,370

Area.—The area of the old Borough is 3,445 acres. The acreage of the portions of Normanton, Osmaston, and Alvaston, and Boulton, added to the Borough, Nov., 1901, is 1,815.

Elevation.—The inhabitants of Derby reside at a mean elevation of 182 feet above sea level, the highest point being at the Borough Boundary in Burton Road, 325 feet, and the lowest at "The Siddals," 142 feet. The elevation at the Market Place is 157 feet.

Houses.—At the Census of 1901 there were 26,625 houses, of these, 24,851 were inhabited, and of the remaining 1,774, there were, on Census night, 995 "in occupation," that is, utilised for business or other purposes but without occupants, whilst 779 were not "in occupation." In addition there were 228 houses in course of erection.

Density.—The mean density of the Borough was equal to 24 persons per acre. The density of the various wards was as follows:—Abbey 34, Arboretum 79, Babington 69, Becket 77, Bridge 24, Castle 75, Dale 20, Derwent 6, Friar Gate 53, Kings' Mead 85, Litchurch 20, Markeaton 52, Normanton 74, Osmaston 5, Peartree 20, and Rowditch 25 persons per acre.

Annual Rateable Value.—The rateable value of the Borough for 1906 was £527,923 for District Rate purposes, and £558,804 for Poor Rate purposes.

Table I.—Population, Number of Births, Total Deaths, and Deaths from certain causes, with the rates per 1,000 of the Population in the Borough of Derby for the past twenty-nine years.

Year	Population.	Corrected Number of Deaths.	Death-rate per 1,000 living.	Births.	Birth-rate per 1,000 living.	Deaths from seven principal Zymotic Diseases.	Zymotic rate per 1,000 living at all ages.	Deaths from Phthisis.	Phthisis Death-rate.	Infantile Mortality per 1,000 Births.	Deaths from Respiratory Diseases exclusive of Phthisis.	Respiratory Death-rate.
1878	80,385	1,613	20·1	3,092	38·4	257	3·1	162	2·0	148	296	3·6
1879	80,385	1,970	24·5	3,139	39·4	380	4·7	147	1·8	132	407	5·0
1880	80,385	1,614	20·1	3,050	37·9	233	2·8	140	1·7	145	224	2·7
1881	81,470	1,529	18·9	3,156	38·8	166	2·03	131	1·6	129	287	3·5
1882	82,687	1,533	18·5	2,959	35·7	187	2·2	140	1·6	139	259	3·1
1883	83,922	1,549	18·6	3,074	36·6	144	1·7	146	1·7	146	263	3·1
1884	85,176	1,569	18·4	3,013	35·3	181	2·1	131	1·5	143	259	3·0
1885	86,449	1,591	18·4	3,055	35·3	132	1·5	128	1·3	138	310	3·5
1886	87,741	1,651	18·8	3,069	35·9	166	1·8	154	1·7	148	272	3·1
1887	89,052	1,683	18·9	2,858	32·9	223	2·5	146	1·6	138	247	2·7
1888	90,383	1,550	17·1	2,824	31·2	163	1·8	116	1·2	145	271	2·9
1889	91,733	1,582	17·2	2,906	31·6	133	1·4	99	1·7	147	281	3·0
1890	93,105	1,843	19·8	2,699	28·9	260	2·7	143	1·5	160	326	3·5
1891	94,422	1,765	18·7	2,885	30·6	126	1·4	139	1·5	139	158	1·7
1892	95,528	1,734	18·2	3,038	31·8	174	1·9	140	1·5	171	295	3·1
1893	96,648	1,740	18·1	3,123	32·4	190	2·0	132	1·4	155	281	2·9
1894	97,781	1,468	15·1	2,890	29·6	151	1·6	103	1·1	121	249	2·6
1895	98,927	1,669	16·9	2,909	29·4	178	1·8	105	1·1	158	254	2·6
1896	100,087	1,577	15·8	2,834	28·4	182	1·9	137	1·4	150	240	2·4
1897	101,262	1,656	16·4	2,803	27·7	173	1·8	99	0·98	168	249	2·5
1898	102,448	1,756	17·2	2,860	28·0	235	2·3	133	1·3	169	257	2·6
1899	103,649	1,775	17·2	2,984	28·8	173	1·7	116	1·2	163	244	2·4
1900	104,684	1,854	17·7	2,900	27·7	247	2·4	113	1·1	173	271	2·6
1901	106,076	1,598	15·1	2,939	27·8	189	1·8	99	0·94	155	220	2·8
1902	116,869	1,639	14·1	3,326	28·5	145	1·3	102	0·87	126	264	2·3
1903	118,707	1,596	13·5	3,215	27·1	108	0·9	102	0·86	128	210	1·8
1904	120,449	1,824	15·2	3,282	27·3	167	1·4	121	1·01	143	264	2·2
1905	122,207	1,746	14·3	3,108	25·5	183	1·5	96	0·79	151	254	2·1
1906	123,981	1,733	14·0	3,103	25·1	188	1·6	113	0·92	116	244	2·0

Vital Statistics for the Year 1906.

Estimated Population.—The estimated population of the Borough at the middle of 1906 was 123,981. This total includes the inhabitants living in the parts of the Borough added in the year 1901, and also makes allowance for the probable increase in these districts. The increase in population during the twelve months is thus estimated to be 1,774, which is 404 higher than the excess of births over deaths.

Marriages.—The number of marriages which were solemnized during 1906 was 981; this represents a rate of persons married equal to 15.9 per 1,000 of the population, which is rather less than the rate recorded last year, and is lower than any recorded since 1893, the first year of which I have a record. The following table gives information relating to the marriage rate for the past 10 years:—

Year.	1897.	1898.	1899.	1900.	1901.	1902.	1903.	1904.	1905.	1906.
Number of Marriages.	953	961	961	1025	943	948	957	973	972	981
Rate.	18·9	18·8	18·6	19·6	17·8	16·3	16·1	16·17	16·0	15·9

Birth-rate.—The births registered during the year numbered 3,103, of which there were:—

	Males.	Females.	Total.	Grand Total.
Legitimate ...	1,502	1,452	2,954	3,103
Illegitimate ...	75	74	149	

From these figures it will be seen that the illegitimate births represent nearly 4.8 per cent. of the present total, as compared with 4.5 per cent. in the previous year. In the following table is set out the distribution of all births, both legitimate and illegitimate:—

TABLE II.—Relating to Births, Legitimate and Illegitimate.

WARD.	BIRTHS.			Birth Rate per 1,000.	Illegitimate Births per 1,000 Births in 1906.	Total Legitimate and Illegitimate Births registered during the years 1902 to 1906.		
	Legitimate	Illegitimate	Total.			Legitimate.	Illegitimate	Illegitimate per 1,000 Births.
Abbey ...	266	13	279	29·6	47	1465	60	40
Arboretum ...	171	11	182	19·0	61	974	31	31
Babington ...	161	5	166	18·3	30	748	26	34
Becket ...	140	10	150	19·1	67	769	44	55
Bridge ...	115	7	122	22·3	58	523	28	51
Castle ...	211	15	226	26·9	67	1176	58	47
Dale ...	193	6	199	38·6	30	911	30	32
Derwent ...	124	7	131	24·7	54	750	25	33
Friargate ...	196	8	204	22·2	40	1077	31	28
Kingsmead ...	158	15	173	22·7	87	885	72	76
Litchurch ...	165	17	182	19·9	94	797	42	51
Markeaton ...	221	9	230	29·6	40	1102	51	45
Normanton ...	210	5	215	27·6	24	1205	24	20
Osmaston ...	217	7	224	38·3	32	994	38	37
Pear Tree ...	270	4	274	36·7	15	1143	29	25
Rowditch ...	136	10	146	16·9	69	874	52	57
Totals ...	2954	149	3103	25·1	48	15,393	641	40

The births registered during the year numbered 3,103, in which total are included 1,577 boys, and 1,526 girls. This represents a birth-rate of 25.1 per 1,000, the lowest recorded in this Borough, and compares with 25.5 last year which was the previous lowest, and with 27.3 in 1904. The experience of Derby is practically that observed in the country as a whole, for the rate for England and Wales in 1906 was 27.0 per 1,000, which stands out in marked contrast with the rate recorded 30 years ago, viz., 36.3 per 1,000 living. The Registrar-General, in his report for 1905, pays some attention to the causes of the decreasing birth-rate, and he shows that about 17 per cent. of the decline in the birth-rate is due to the decrease in the proportion of married women in the female population of

TABLE III.—Infantile Mortality during the Year 1906.

Deaths from stated Causes in Weeks and Months under One Year of Age.

	CAUSE OF DEATH.	Under 1 Week.	1–2 Weeks.	2–3 Weeks.	3–4 Weeks.	Total under 1 Month.	1–2 Months.	2–3 Months.	3–4 Months.	4–5 Months.	5–6 Months.	6–7 Months.	7–8 Months.	8–9 Months.	9–10 Months.	10–11 Months.	11–12 Months.	Total Deaths under One Year.	STRANGERS.
	Certified	85	13	11	10	119	56	21	31	22	17	15	20	10	10	16	17	354	
	Uncertified	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
i. Common Infectious Diseases	Small Pox	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Chicken-pox	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Measles	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Scarlet Fever..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Diphtheria: Croup	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1	..
	Whooping Cough	..	..	..	..	..	..	..	1	1	..	1	2	2	..	4	3	14	..
ii. Diarrhœal *Diseases.*	Diarrhœa, all forms ..	..	1	1	..	2	5	4	9	6	4	3	1	2	3	1	3	43	..
	Enteritis, Muco-enteritis, Gastro-enteritis ..	..	1	..	..	1	3	..	1	..	..	1	..	..	..	1	..	7	..
	Gastritis, Gastro-intestinal Catarrh ..	..	..	..	..	..	2	1	1	2	..	..	..	..	..	..	..	6	..
iii. Wasting Diseases.	Premature Birth	50	2	5	3	60	5	..	1	..	..	..	..	..	..	..	..	66	1
	Congenital Defects	7	..	2	..	9	3	..	..	1	..	1	..	..	..	..	1	15	1
	Injury at Birth	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1	..
	Want of Breast-milk, Starvation	..	..	..	..	..	..	..	..	..	2	..	1	..	..	..	..	3	..
	Atrophy, Debility, Marasmus	15	5	1	2	23	9	2	3	4	3	1	1	..	2	..	..	48	1
iv. Tuberculous Diseases.	Tuberculous Meningitis ..	..	..	..	..	..	1	..	..	..	..	..	2	..	..	3	..	6	..
	Tuberculous Peritonitis: Tabes Mesenterica ..	..	..	..	..	..	..	..	1	1	..	1	1	..	..	..	..	4	..
	Other Tuberculous Diseases..	..	..	..	..	..	1	..	..	..	..	..	1	1	..	2	..	5	..
v. Other Causes.	Erysipelas	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Syphilis	..	..	..	..	..	4	..	1	..	..	..	..	..	..	..	..	5	..
	Rickets	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Meningitis (*not Tuberculous*)	..	..	..	..	..	1	..	..	..	..	2	..	..	..	..	..	3	..
	Convulsions	7	2	1	4	14	5	6	5	1	3	1	1	2	1	2	1	42	..
	Bronchitis	..	..	..	..	..	7	2	2	1	1	1	5	1	1	1	1	23	..
	Laryngitis	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Pneumonia	..	..	..	..	..	..	1	2	2	1	1	3	1	1	..	3	15	..
	Suffocation, overlying ..	..	..	..	..	..	2	..	..	..	..	1	..	..	..	..	..	3	..
	Other Causes	5	2	1	1	9	8	5	4	3	3	1	2	1	1	2	5	44	2
		85	13	11	10	119	56	21	31	22	17	15	20	10	10	16	17	354	5

conceptive ages, and that another 10 per cent. is due to the decrease of illegitimacy. With regard to the balance of 73 per cent., some must be attributed to the alteration in the age constitution of married women in the direction of a higher age, which, of course, tends to result in reduced fertility. He shows that if the number of married women be divided among three age periods, viz., 15-25, 25-35, and 35-45, the proportion of married women at the earlier of these age periods has been decreasing since 1871. This is only a slight contributing factor, and there can be little doubt that the greater part of the 73 per cent. is to be accounted for by the deliberate restriction of child-bearing on the part of the people themselves.

The influence of the decreasing birth-rate on the national physique is an important aspect of the case. It is interesting to note that several counties show an exceptionally high birth-rate, and in these same counties there is an exceptionally high infantile mortality; the converse likewise holds, that with a low birth-rate there is frequently a low infantile mortality, and therefore there is a tendency for the survivors in these different districts to balance, which results at about the age of five years. It is apparent that this balancing is brought about by an increase in the deaths amongst children under the age of five. These deaths probably do not represent the total effect, for it is extremely unlikely that the survivors in these localities which suffer from heavy mortality among young children can be as strong on the average as those in the more healthy districts. In some mining districts the birth-rates are exceptionally high, and the high infantile mortality does not reduce the total survivors to the level of the districts with the low birth-rate and the low mortality, but it is not to such a surplus—which is to some extent handicapped at this early stage by adverse conditions of life—that we should depend for the best survivors to maintain the standard of population, but rather to the rural areas with their comparatively low rates of infantile mortality. Unfortunately these country districts are gradually losing the most vigorous of the young adults owing to the attraction of town-life. It seems, therefore, that although an average birth-rate may not altogether be a disadvantage, the depopulation of country areas is a social condition which is not to be regarded with absolute equanimity.

As regards the various wards the birth-rate, as in previous years, varied between very wide limits, being as low as 18.3 in Babington Ward and as high as 38.5 in Dale Ward. Practically each year these wards show respectively the highest and lowest birth-rates. Rates of over 30 were also recorded in Pear Tree Ward and Osmaston Ward, whilst in Abbey Ward the rate was only just below this figure. This is a fairly constant position for these various wards. It can hardly be due to errors resulting from fewness of numbers. The subject will receive detailed consideration when the figures recorded at another census are available. It will be remembered that the area of the town was sub-divided at the last census into sixteen wards, and the totals cannot be rendered comparable with the totals recorded in the wards as they previously existed.

With respect to illegitimacy, the greatest proportion of the illegitimate births was noted in Litchurch Ward. This is exceptional for in the average for the past five years Litchurch Ward does not nearly show the worst result. Next to Litchurch is Kings Mead Ward with a rate of 87 illegitimate births to every 1,000 births. The totals for each individual year are too small to allow of very reliable inferences being deduced. The aggregate totals for previous years are, however, reaching a figure which will help to eliminate the error of annual variation and the proportion which each ward bears to the total is becoming more accurate. Kings Mead Ward has a rate of illegitimacy very much higher than any other, the nearest being Rowditch in which ward is placed the Workhouse, and to this fact must be attributed some proportion of the higher rate, as such births are credited to that ward. Becket Ward and Bridge Ward closely approximate Rowditch Ward without any similar disturbing factor. The average for the whole town is 40 per 1,000, and with the exception of the wards named, Markeaton, Litchurch, and Castle Wards are the ones which annually exceed this general average.

The influence of illegitimacy is well expressed by the following extract from the Registrar General's Report for 1905.

"The proportion of illegitimate children cannot serve as a standard of morality: nevertheless a remarkable frequency of such children is without doubt in many respects a great evil. The invariable fact that the mortality among the illegitimate is far greater than among the legitimate, and that many more of them are still-born, shows clearly enough how much more unfavourable their position is from the first. Who can doubt that their bringing-up is much harder and more difficult? That the existence of a class of men, bound to society by few or no family ties, is not a matter of indifference to the State? The great majority of foundlings are illegitimate, which of itself shows how little, as a general rule, the mothers can or will care for these children. It is beyond doubt that fewer illegitimate children grow into maturity; they get through the world with more trouble than children born in wedlock; that more of them are poor; and that, therefore, more of them become criminals. Illegitimacy is in itself an evil to a man, and the State should seek to diminish the number of these births, and carefully inquire to what circumstance any increase is to be ascribed."

The unsatisfactory state of the law in relation to the burial of still-born children without registration has before been referred to, and I append the customary table which shows that no fewer than 9.4 per cent. of the total of burials in the Derby cemeteries were those of still-born children. No stronger argument in favour of a proper system of registration of such cases by a duly authorised official is necessary. For the particulars contained in the table I am indebted to Mr. C. E. Oliver, Clerk to the Derby Burial Board.

Burials in the Derby Cemeteries during the past 12 years.

Year.	Ordinary Burials.	Burials of Still-born Children.	Total.	Percentage of Burials of Still-born Children to the whole.
1895	1587	210	1797	11·7
1896	1510	218	1728	12·7
1897	1581	182	1763	10·4
1898	1744	178	1922	9·3
1899	1787	193	1980	9·8
1900	1887	195	2082	9·4
1901	1627	246	1873	13·2
1902	1552	217	1769	12·3
1903	1522	184	1706	10·8
1904	1704	154	1858	8·3
1905	1692	161	1853	8·5
1906	1666	171	1837	9·4

Annual Rate of Mortality.—The total number of deaths registered during the year was 1,832, as against 1,825 in 1905, and 1,905 in 1904; of these deaths 99 were of strangers; these being deducted there is left a net total of 1,733 occurring among people usually resident in Derby, but making no allowance for Derby residents who may have died outside the town. The net death-rate, therefore, from all causes was 14.0 per 1,000 as against 14.3 in 1905, and 15.2 in 1904. With one exception, viz., in the year 1903 this is the lowest death-rate recorded in the Borough. In the last six years the rate has been below 15 on four occasions, whilst in the two other years it was very little over 15. Considering that this is a working class community this rate is highly satisfactory and I trust it will be maintained.

Mortality in Age Groups.—The type of disease to which persons succumb varies considerably at different ages, as also does the resisting power of the individual; it is therefore worth while briefly to consider the causes of mortality at the different periods of life, viz., infancy, childhood, school-age, puberty, maturity, and decline.

a. INFANCY. In the accompanying Table III. are set out the deaths which have occurred among children who have not reached the age of one year. It will be seen that there were 354 such deaths and that of this total practically one-fourth of them died during the first week of life. The great cause of this early mortality is immaturity of the child, which is born with insufficient vitality to enable it to live as a separate individual. It is probable that many of the deaths at this early period of life which are registered as due to atrophy, debility, and marasmus are really due to premature birth. Amongst those who are not born prematurely, convulsions caused many deaths, such attacks at this age most frequently result from digestive disorders. By the end of the first month over one-third of the deaths have occurred, and up to this age the prematurely born children continue to succumb as well as those who are regarded as debilitated children at birth.

It will be observed that from this age forward prematurity drops practically out of the causes of death, and atrophy and debility, due now to other causes than prematurity, assume an increasing importance as does also convulsions, and with these diseases are associated practically a new introduction, diarrhœa. In a great number of instances there can be little doubt that the real exciting cause of these deaths is improper feeding, although to the causes contributing to deaths from convulsions there must, at a later period, be added the dangers incidental to dentition. At this time an irritable condition of the nervous system predisposes to dangerous convulsive attacks. Tubercular diseases and deaths from chest ailments assume an increasing importance after the age of one month.

The importance of the method of feeding as a factor influencing the mortality of infants under the age of one year, is such as to justify separate and detailed consideration, and to obtaining more precise information on this subject we have—in this town—been devoting a considerable amount of time and energies for many years past. Since the year 1900 the local registrar has forwarded to the Medical Officer of Health the names and addresses of all children registered. These have been systematically visited and accurate records kept of the method of feeding, as well as of deaths which have occurred amongst them before attaining the age of one year. The total number of children which have been under observation is now over 13,000. There have been registered 15,675 children between November, 1900 and November, 1905, the last member of this group attained the age of twelve months in November, 1906. From the total the following deductions must be made:—on account of no visit being made, but in respect of whom no death has been registered, 1,733; and on account of no visit being made owing to death occurring before any information could be obtained, 94. There are also excluded the deaths of 574 children, for the reason that the death could not have been influenced by the manner of feeding, thus 55 of them suffered from some congenital defect incompatible with life, in 127 cases death took place owing to debility and no food had been given; in 386 instances the child was prematurely born, and in six other cases the death was due to some cause not associated with the manner of feeding. These deductions leave a net total of 13,274 children who had been under the direct observation of the women inspectors. Of this number 66 per cent. were breast-fed, 19 per cent. were wholly hand-fed, and the remaining 16 per cent. were partly reared by hand and partly by natural means. The method of feeding has a very important bearing on the probability of a child surviving to the age of one year, as will be seen from the following Table:—

Table **IV.**—*Mortality per 1,000 from Certain Diseases among Children who were Breast-fed or Hand-fed, or who were at first Breast-fed and subsequently Hand-fed (Mixed).*

	Breast-fed.		Mixed.		Hand-fed.		All three classes.	
Number of children.	8796		2066		2412		13274	
Disease.	Number of deaths.	Death-rate per 1,000.	Number of deaths.	Death-rate per 1,000.	Number of deaths.	Death-rate per 1,000.	Number of deaths.	Death-rate per 1,000.
Bronchitis and Pneumonia	126	14.4	27	13.1	70	29.1	223	16.8
Diarrhœa and Epidemic Enteritis	78	8.9	49	23.8	134	55.6	261	19.7
Gastritis and Gastro-Enteritis	12	1.4	7	3.4	19	7.9	38	2.9
Marasmus	42	4.8	26	12.6	58	24.1	126	9.5
Atrophy and Debility	68	7.8	14	6.8	54	22.4	136	10.3
Tabes Mesenterica ..	8	1.0	2	1.0	14	5.9	24	1.9
Various Abdominal Tuberculoses ..	5	0.6	7	3.4	10	4.2	22	1.7
All other Tuberculous Diseases	25	2.9	10	4.9	9	3.8	44	3.4
Convulsions	123	14.0	41	19.9	67	27.8	231	17.5
Dentition	12	1.4	8	3.9	10	4.2	30	2.2
Zymotic Diseases other than Diarrhœa ..	52	6.0	24	11.7	29	12.1	105	8.0
All other Diseases ..	78	8.9	9	4.4	51	21.2	138	10.4
Totals	629	71.6	224	108.5	525	217.7	1378	103.9

The death-rate amongst the breast-fed children is 71.6 per 1,000, as compared with 217.7 per 1,000 among those hand-fed, and 108.5 per 1,000 among those only partly breast-fed. It is important also to note that not only is this marked difference to be seen in the aggregated death-rate but in every classification there is the same result, the death-rate is invariably higher—in fact there is not a single instance in which the death-rate amongst breast-fed children even approximates the higher rates noted amongst those who were hand-fed. The statistics contained in the preceding table have a direct bearing upon the first conclusion arrived at by the Royal Commission appointed to enquire into the relations of human and animal tuberculosis. They state that there can be no doubt but that in a large number of cases the tuberculosis occurring in the human subject, especially in children, is the direct result of introduction into the human body of the bacillus of bovine tuberculosis; and there can be no doubt that in the majority at least of these cases the bacillus is introduced through cows' milk. That statement receives confirmation from the investigations which have been carried out on the manner of feeding children in this Borough, and if the deaths from the disease known as tabes mesenterica, and those classified as "various abdominal tuberculoses," are added together we find that out of 13,274 children, 46 died from one or other of this class of disease, which represents a death-rate of 3.47 per 1,000. These 46 deaths were distributed as follows:—Amongst the 8,796 breast-fed children 13 died, which is equal to a rate of 1.48 per 1,000, among the 2,066 children fed partly by hand and partly by breast a total of nine deaths representing a rate of 4.36 per 1,000 was observed, whilst no fewer than 24 deaths were registered amongst the 2,412 wholly hand-fed children, which equals a rate of practically 10 per 1,000. The cases of abdominal tuberculosis among the breast-fed children may be accounted for partly in consequence of errors in diagnosis, and partly from the fact—ascertained on later enquiry—that the method of feeding changes from breast-fed to either hand or mixed feeding before death. It thus follows that the death-rate among the breast-fed children is an absolute maximum, and that recorded amongst the hand-fed children is a minimum. It is a further interesting point that if abdominal tuberculosis and tabes mesenterica are excluded from the deaths from tuberculosis, the remaining fatal cases of tuberculosis much more nearly approximate each other in the various classifications of feeding. Thus, 44 such deaths occurred amongst the whole of the children, which represents a death-rate of 3.4 per 1,000; 25 of these were amongst breast-fed children, which equals a rate of 2.9, 10 amongst the mixed-fed children, giving a rate of 4.9, and 9 amongst the 2,400 hand-fed children, which is equal to a rate of 3.8 per 1,000.

COUNTY BOROUGH OF DERBY.

Table V.—Causes of, and Ages at, Death during 1906.

Causes of Death.	Deaths in or belonging to whole District at subjoined Ages.							Deaths in or belonging to Localities (at all Ages).																Total Deaths in Public Institutions in the District.	Strangers.
	All Ages.	Under 1 year.	1 and under 5.	5 and under 15.	15 and under. 25.	25 and under 65.	65 and up-ward.	Abbey Ward.	Arboretum Ward.	Babington Ward.	Becket Ward.	Bridge Ward.	Castle Ward.	Dale Ward.	Derwent Ward.	Friargate Ward.	King's Mead Ward.	Litchurch Ward.	Markeaton Ward.	Normanton Ward.	Osmaston Ward.	Pear Tree Ward.	Rowditch Ward.		
Small-pox	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Measles...	2	...	2	...	..	...	...	..	...	...	...	1	...	...	...	...	...	...	...	1	...	...	...	...	...
Scarlet Fever ...	4	..	4	...	...	...	...	..	1	1	...	...	...	1	...	...	...	1	...	...	...	...	...	2	...
Whooping-cough	29	14	15	...	...	...	..	...	1	2	3	...	3	1	2	1	4	1	1	...	5	2	3	1	...
Diphtheria and Membranous Croup ...	64	1	26	34	2	1	..	5	2	6	3	4	5	8	7	2	1	4	6	4	...	4	3	22	2
Croup ...	3	1	1	1	...	...	...	...	1	...	...	...	...	...	1	...	...	...	1	...	...	...	...	...	...
Typhus	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Fever Enteric	11	...	1	2	2	6	...	3	...	...	...	3	1	1	1	...	...	...	1	...	...	1	...	7	1
Other Continued	..	..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Epidemic Influenza ...	27	8	1	1	...	10	7	1	3	1	1	1	4	2	..	1	...	...	...	5	1	5	2	...	...
Cholera ...	...	...	...	...	...	..	...	...	...	...	...	...	..	...	...	...	...	...	...	...	...	...	...	...	...
Plague ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diarrhœa	78	56	12	1	...	5	4	5	3	4	5	2	12	4	3	3	4	6	9	3	3	6	6	1	...
Enteritis	16	...	3	..	1	5	7	1	1	2	3	...	2	1	...	...	1	2	1	...	...	1	1	1	...
Puerperal Fever	3	...	...	...	...	3	...	1	...	...	..	...	...	...	1	...	...	1	...	...	...	...	...	3	2
Erysipelas	2		..	...	1	1	..	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	...
Other Septic Diseases	..	...	..	...	...	..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Phthisis (Pulmonary Tuberculosis) ...	113	...	2	2	19	88	2	7	8	10	3	6	7	5	4	10	11	6	11	5	6	7	7	19	1
Other Tubercular Diseases...	56	15	20	14	1	6	...	5	3	3	2	1	8	4	2	4	4	1	4	4	3	4	4	15	10
Cancer, Malignant Disease...	92	...	..	1	...	65	26	10	3	11	1	5	5	3	2	3	7	13	4	6	5	9	5	25	8
Bronchitis	141	23	11	1	...	41	65	17	10	11	7	2	6	6	7	5	20	14	15	3	3	7	8	9	1
Pneumonia	77	15	15	5	3	34	5	9	5	6	1	2	3	6	2	4	9	7	5	6	5	3	4	15	4
Pleurisy...	4	...	...	...	...	3	1	...	...	...	1	. .	...	...	...	...	...	2	...	1	...	...	...	1	...
Other Diseases of Respiratory Organs ...	22	2	2	...	1	15	2	...	1	4	...	...	4	2	...	..	4	4	...	...	1	2	...	6	1
Alcoholism, Cirrhosis of Liver	24	...	...	...	...	19	5	...	1	3	2	...	2	2	1	...	4	3	4	...	...	1	1	5	...
Venereal Diseases	6	5	1	...	...	...	...	...	...	...	...	...	...		...	1	3	...	1	...	...	1	...	1	1
Premature Birth	66	66	...	...	...	...	..	2	3	3	7	3	7	1	4	3	6	10	6	3	2	5	1	2	1
Diseases and Accidents of Parturition	7	...	...	...	2	5	...	1	1	...	...	...	1	1	...	1	1	1	...	...	...	...	...	3	1
Heart Diseases	191	13	5	10	9	95	59	11	8	21	6	12	17	13	11	12	14	14	11	8	11	11	11	33	11
Accidents	36	4	5	4	1	15	7	2	1	1	...	2	5	...	2	4	3	2	1	4	3	4	2	22	12
Suicides...	15	...	...	...	...	15	...	...	...	2	2	1	1	...	1	...	1	...	...	1	...	1	5	1	
Execution	...	...	...	...	...	...	...	...	...	...	...	. .	...	...	...	...	...	...	...	.	...	...	...	1	1
All other Causes	644	131	41	18	18	187	249	47	43	54	41	25	50	20	25	41	49	49	54	31	37	34	44	175	42
All Causes	1733	354	167	94	60	619	439	127	99	145	88	70	143	81	76	95	146	141	135	86	85	109	107	370	99
Non-Residents	99	5	7	13	9	45	20	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

OTHER AGES.—During the years 1 to 5 it will be observed from Table V. that the commoner zymotic ailments, and on this occasion particularly, Whooping Cough and Diphtheria cause most deaths. Diarrhœa diminishes in prevalence, whilst tubercular diseases, other than Phthisis, and also chest ailments are nearly as common as during the first year of life. At the school ages, 5-15, the zymotic diseases are still most fatal, but of these it was from Diphtheria that the greatest risk was incurred during 1906. Tubercular diseases are among the most common of the fatal attacks, but with these exceptions there are no very prominent causes of death. With the arrival of puberty, 15-25 years, Phthisis begins to make its influence seen in the mortality returns—19 deaths out of a total of 160 registered at this age period were due to this disease. At the ages 25 to 65 we find Phthisis is one of the most frequent causes of death. Deaths from Cancer likewise increase in number, and at the later half of the period chest ailments and heart diseases are the diseases which most frequently result fatally. Suicides, of which there were 15 registered, are most frequently recorded in this age period as also are deaths from Enteric Fever. From 65 years upwards—the decline of life—Bronchitis, heart diseases and Cancer cause most deaths, and the influence of the so-called preventable diseases is now practically a negligible quantity.

District Mortality Rates.—In Table VI. the various mortality rates which have been recorded in the different wards into which the town is divided are set out; the deaths in public institutions have been relegated to the wards to which the various persons belonged before they were removed. Judged by the general death-rate, the healthiest districts were Arboretum and Friar GateWards, with rates of 10.4 per 1,000, Normanton, with a rate of 11.1, and Becket 11.2.

TABLE **VI.**—Population, Density, Deaths, and certain Death Rates in the various Wards of the Borough of Derby for the Year 1906.

WARDS.	Population in 1901.	Estimated population in 1906.	Acreage.	Density in persons per acre.	Total Deaths.	Death-rate per 1,000 living.	Deaths from seven principal Zymotic Diseases.	Zymotic death rate.	Deaths from Respiratory Diseases exclusive of Phthisis.	Respiratory death rate.	Deaths from Phthisis	Phthisis' death rate.	Number of deaths of infants under 1 year.	Deaths of infants under 1 year of age per 1,000 births.
Abbey ...	8,747	9,442	285	34	127	13·5	13	1·4	26	2·8	7	0·8	27	98
Arboretum ...	8,889	9 596	122	79	99	10·4	7	0·8	16	1·7	8	0·9	18	99
Babington	8,447	9,119	134	69	145	16·0	13	1·5	21	2·4	10	1·1	20	121
Becket ...	7,297	7,877	102	77	88	11·2	11	1·4	9	1·2	3	0·4	22	147
Bridge ...	5,081	5,485	229	24	70	12·8	10	1·9	4	0·8	6	1·1	8	66
Castle ...	7,786	8,405	112	75	143	17·1	21	2·5	13	1·6	7	0·9	36	160
Dale ...	4,785	5,166	269	20	81	15·7	15	3·0	14	2·8	5	1·0	15	76
Derwent ...	4,933	5,325	907	6	76	14·3	13	2·5	9	1·7	4	0·8	16	123
Friargate ...	8,516	9,193	176	53	95	10·4	6	0·7	9	1·0	10	1·1	13	64
King's Mead ...	7,064	7,626	90	85	146	19·2	9	1·2	33	4·4	11	1·5	33	191
Litchurch ...	8,474	9,148	462	20	141	15·5	12	1·4	27	3·0	6	0·7	28	154
Markeaton ..	7,200	7,773	151	52	135	17·4	17	2·2	20	2·6	11	1·5	34	148
Normanton ...	7,225	7,800	106	74	86	11·1	8	1·1	10	1·3	5	0·7	14	66
Osmaston ...	5,429	5,861	1,381	5	85	14·6	8	1·4	9	1·6	6	1·1	25	112
Pear Tree	6,930	7,480	392	20	109	14·6	13	1·8	12	1·7	7	1·0	22	81
Rowditch ...	8,045	8,685	354	25	107	12·4	12	1·4	12	1·4	7	0·9	23	94
*Institutions ...	...	...	...	...	370	...	33	...	31	...	19	...	...	..
Non-Residents	.	...	...	...	99	...	3	...	6	...	1	...	5	...
†Totals ...	114,848	123,981	5,272	24	1,733	14·0	188	1·6	244	2·0	113	1·0	354	116

*The deaths in Institutions have been relegated to the various Wards.

†Excluding Non-Residents.

In no ward was a rate of 20 per 1,000 recorded, the nearest approach to that total being in Kings Mead, where a rate of 19.2, as against 18.1 last year, was observed. The high death-rate in this ward was contributed to in no small measure, by the deaths among children under one year of age. The infantile mortality in the town as a whole was only 116 per 1,000 births, but in the Kings Mead area it totalled no less than 191. Infantile mortality rates of less than 100 per 1,000 births were recorded in Friar Gate 64, Bridge 66, Dale 76, Pear Tree 81, and Rowditch, Abbey, and Aboretum with 94, 98, and 99 per 1,000 respectively. The death-rate from Phthisis was at the rate of 1 per 1,000 of the population, taking the town as a whole, and this was exceeded, as will be seen by reference to the table in five wards, the highest being again Kings Mead Ward with a rate of 50 per cent. higher than the town rate, viz., 1.5. The zymotic rate was 1.6 per 1,000 for the whole town, which was exceeded in six wards, the highest, 3, being noted in Dale Ward. The wards with high infantile mortality usually have a high zymotic rate, but in this instance a low infantile mortality is associated with a high zymotic rate, the cause contributing to this high rate being diphtheria, 8 of the 15 deaths registered as occurring in that ward from zymotic ailments being attributed to that disease.

Inquests.—I am informed by the Borough Coroner that the number of Inquests held by him during the year ended December 31st, 1906, was 157, being made up by 100 held on males, and 57 on females. There were no unregistered deaths in the Borough; the cause of every death was certified by a medical practitioner or by the Coroner.

Mortuary.—The Coroner's Officer, Mr. John Dexter, informs me that the number of dead bodies which were received into the Mortuary during 1906 was 17, and that four post-mortem examinations were conducted in the building during the year. The building may now be considered as in a satisfactory condition.

The Notification of Infectious Diseases.—The total number of cases of infectious diseases notified in accordance with the requirements of the Infectious Diseases Notification Act of 1890, was 1,049, as compared with 1,076 in the previous year.

The highest and lowest weekly incidences were as follows :—

Week ending, 1906.		Cases notified.
17th November	... highest number ...	32
9th June 7th July 18th August	... lowest numbers ...	11

The following summary gives particulars of these various diseases :

Cases of Infectious Disease notified during 1906.

Quarters.	Totals.	Small Pox.	Scarlet Fever.	Diphtheria.	Continued Fever.	Enteric Fever.	Erysipelas.	Puerperal Fever.	Membranous Croup.
First ...	288	...	92	153	...	10	30	2	1
Second	224	...	62	125	...	8	22	5	2
Third ...	223	...	76	115	...	12	17	3	...
Fourth...	314	...	60	168	...	41	44	1	...
Year ...	1,049	...	290	561	...	71	113	11	3

Table VI. gives information respecting the notification of infectious diseases in previous years. It will be recognised that the number notified last year was well above the average, the increase being chiefly due to the excessive incidence of Diphtheria, and an increase in the number of cases of Enteric Fever, and Erysipelas.

In dealing with these cases the following action was taken :—

	Quarters.				
	First.	Second.	Third.	Fourth.	Totals.
Number of visits made by Inspectors	1044	774	811	1044	3673
Cases isolated. Borough Hospital :— Scarlet Fever	46	37	48	30	161
Cases isolated. Royal Infirmary :— Diphtheria	26	19	11	23	79
Enteric Fever	7	3	9	22	41
Erysipelas	3	...	...	...	3
Puerperal Fever	...	...	1	...	1
Cases willing to be isolated but for which no room could be found ...	20	16	19	40	95
Cases in which isolation was delayed	8	3	4	8	23
Number of rooms fumigated	317	290	214	247	1068

Table **VII.**—Number of cases of Infectious Disease notified in the Borough of Derby during 1906, and in each year since 1881.

Diseases.	1881	1882	1883	1884	1885	1886	1887	1888	1889	1890	1891	1892	1893	1894	1895	1896	1897	1898	1899	1900	1901	1902	1903	1904	1905	1906
Small Pox ...	46	15	2	7	...	...	...	20	...	5	...	11	52	3	94	1	1	...	...	1	1	8	48	210	123	...
Scarlet Fever .	423	770	506	389	232	167	64	756	775	346	318	470	501	513	364	427	432	481	885	602	616	332	185	638	535	290
Diphtheria ...	6	10	8	...	1	6	27	23	46	81	66	67	50	46	43	45	57	74	60	52	74	63	83	150	271	561
Membranous Croup ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	3
Enteric & Con. Fever ...	95	113	51	344	57	162	105	163	99	64	66	55	111	104	99	104	125	159	141	125	114	85	64	64	44	71
Typhus Fever	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cholera ...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...
Puerperal Fever	6	6	7	11	2	1	1	3	5	1	8	9	11	7	10	3	3	6	8	7	10	13	14	16	13	11
Erysipelas ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	67	52	88	135	138	89	113
Phthisis* ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	56	105	103	82	111
Totals ...	577	914	574	751	292	336	197	965	925	497	458	612	727	673	610	580	618	720	1094	851	867	645	634	1319	1158	1160

In addition to the above, the following cases of Measles were also notified during short periods of voluntary notification :—1884, 513 cases ; 1887, 874 cases ; 1888, 33 cases ; also 34 cases of Scarlet Fever, and 3 cases of Enteric Fever from the annexed areas during 1901.

* Phthisis became a notifiable (voluntarily) disease in July, 1902

Hospital for Infectious Diseases.—Infectious diseases in this town are treated both in the Borough Hospital and in the wards of the Royal Infirmary. Formerly the latter institution undertook the treatment of all such cases. Small-pox and Scarlet Fever, however—some twenty years ago—were found to present difficulties which necessitated a separate hospital being erected in which to treat these diseases, and this responsibility was undertaken by the municipality. Cases of Enteric Fever and Diphtheria continued to be treated in the wards of the Infirmary, and the same authority made itself responsible for the treatment of any cases of Scarlet Fever which developed in the institution. This latter arrangement did not work satisfactorily, and ultimately the Corporation arranged to remove from the Infirmary to the Borough Hospital all cases of Scarlet Fever. The time has now arrived when the treatment of diphtheria cases presents difficulties, and this for two reasons, the first being the increase in the last two or three years in the number of notified cases of diphtheria, and the second being the increase in the call for beds for diphtheria patients at the same time as increased calls, in consequence of the growth of the population in the Infirmary district, are being made upon the beds required for general diseases. Notice to the effect that on a stated date no further cases of diphtheria will be undertaken by the Infirmary authorities has been received by the Sanitary Committee, and the necessary arrangements for dealing with such cases are now under consideration.

No very heavy calls have been made on the Hospital during the past year. No cases of Small-pox have been admitted, and the fact that the number of notified cases of Scarlet Fever has been low has resulted in fewer cases of that disease being treated than has been the case in many previous years.

No addition has been made to buildings, but the unclimable fence to which reference was made in the last report has been completed, and the whole of the grounds on which buildings are placed for the treatment of patients are now enclosed either by a brick wall or by a close wood fence about seven feet in height.

I have again to express my appreciation of the work performed by Sister Mould and the whole of the resident staff, whose loyal assistance and co-operation have materially helped to promote the efficiency of the Hospital.

The average length of stay in the Hospital was 51 days for Scarlet Fever, as compared with 48 and 45 in the two previous years. The longest time any patient was under treatment was 124 days.

The cost of provisioning the Hospital was slightly higher in 1906 than in 1905, the reason for that being that the cost of provisioning the staff is charged against the patients, so that with fever patients this expense is proportionately higher per patient. The total days of treatment in 1906 were 8,988, as against 11,438 in 1905, and the cost, 1s. 2d. per patient per day in 1906, as against 1s. in 1905. These facts and other details referring to Hospital provisioning are contained in the subjoined table:—

Hospital Provisioning, 1906.

1906.	Days of treatment.	Average Patients per day.	Cost of Provisioning.			Average Cost per Patient per day.*	
			£	s.	d.	s.	d.
1st Quarter	2941	32·67	142	3	9½	0	11·60
2nd ,,	2257	24·80	127	13	9	1	1·58
3rd ,,	2152	23·40	120	14	1	1	1·47
4th ,,	1638	17·81	128	0	10	1	6·77
Totals 1906	8988	24·63	518	12	5½	1	1·85
Totals for previous year	11,438	31·39	577	12	4½	1	0·12

*This includes cost of provisioning staff, but does not include working days of staff.

Mortality from Zymotic Diseases:—

Zymotic Mortality during the past five years.

Years.	Ten Years' Average.	1902	1903	1904	1905	1906.		
						Derby.	England and Wales.	76 Great Towns.
Rate per 1,000	1·66	1·2	0·9	1·4	1·5	1·6	1·73	2·24

COUNTY BOROUGH OF DERBY.

TABLE VIII.—Cases of Infectious Disease Notified during the Year 1906.

Notifiable Disease.	Cases notified in whole District: At all Ages.	At Ages—Years: Under 1.	1 to 5.	5 to 15.	15 to 25.	25 to 65.	65 and upwards.
Small-pox	...	...	...	...	..	.	...
Cholera	...	...	...	...	...	...	...
Diphtheria	562	4	121	356	43	37	1
Membranous Croup ...	3	...	1	2	.	..	...
Erysipelas...	113	...	3	14	17	66	13
Scarlet Fever	290	1	78	178	19	14	...
Typhus Fever	...	...	...	...	...	...	...
Enteric Fever	70	...	5	16	17	32	...
Relapsing Fever	...	...	...	..	...	...	...
Continued Fever... ...	...	...	...	...	...	...	...
Puerperal Fever	11	...	...	...	3	8	...
Plague	...	...	...	...	...	...	...
Phthisis ... . (Voluntary Notification)	111	...	1	9	34	66	1
Totals	1160	5	209	575	133	223	15

Notifiable Disease.	Total Cases Notified in each Locality: Abbey.	Arboretum.	Babington. (I)	Becket.	Bridge.	Castle.	Dale.	Derwent. (H)	Friargate.	King's Mead.	Litchurch.	Markeaton.	Normanton.	Osmaston.	Pear Tree.	Rowditch. (W)
Small-pox	...	...	...	...	...	...	...	...	...	...	.	...	...	...	...	...
Cholera	...	...	..	...	...	...	...	...	...	...	...	...	...	...	...	...
Diphtheria	32	20	40	23	21	33	47	31	58	35	34	58	36	40	18	36
Membranous Croup	...	1	...	...	1	1	..	...	...	...	...	...	...	..	...	...
Erysipelas	6	10	14	8	1	2	8	3	6	9	7	11	6	5	13	4
Scarlet Fever	13	23	23	5	17	14	20	16	34	11	14	10	11	51	14	14
Typhus Fever	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Enteric Fever	7	4	5	1	6	6	4	13	3	4	5	4	5	1	1	1
Relapsing Fever	...	...	...	...	..	...	...	..	...	..	...	...	...	..	...	...
Continued Fever	...	...	..	...	...	...	...	...	...	...	...	...	...	...	...	...
Puerperal Fever	1	...	...	...	...	...	3	3	...	...	1	1	2	...	...	...
Plague	...	...	...	...	...	...	...	...	...	...	...	...	...	..	...	...
Phthisis (Voluntary Notification)	10	4	4	5	2	13	5	3	9	5	6	9	11	6	10	9
Totals	69	62	86	42	48	69	87	69	110	64	67	93	71	103	56	64

Notifiable Disease.	No. of Cases removed to Hospital from each Locality: Abbey.	Arboretum.	Babington. (I)	Becket.	Bridge.	Castle.	Dale.	Derwent (H)	Friargate.	King's Mead.	Litchurch.	Markeaton.	Normanton.	Osmaston.	Pear Tree.	Rowditch. (W)	Total.
Small-pox	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cholera	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diphtheria	2	4	8	5	...	9	6	8	9	4	6	7	2	...	2	8	80
Membranous Croup	...	...	...	...	...	...	...	...	...	...	. .	...	...	...	...	...	...
Erysipelas	..	...	...	...	...	...	...	1	...	1	1	...	...	...	...	..	3
Scarlet Fever	11	18	20	2	3	7	10	12	15	5	10	5	5	23	7	8	161
Typhus Fever	...	...	...	...	...	...	...	...	...	..	...	...	...	...	...	...	...
Enteric Fever	4	2	3	1	2	5	1	5	2	3	4	2	4	1	1	1	41
Relapsing Fever	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Continued Fever	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Puerperal Fever	...	...	...	...		...	...	1	...	...	...	...	...	...	...	...	1
Plague	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Phthisis (Voluntary Notification)	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Totals	17	24	31	8	5	21	17	27	26	13	21	14	11	24	10	17	286

(I) Derbyshire Royal Infirmary for treatment of Enteric Fever and Diphtheria cases.
(H) Derby Borough Isolation Hospital for treatment of cases of Scarlet Fever.
(H) One case of Diphtheria was also treated at the Borough Hospital.

The diseases which are included in the above total and which are usually designated the seven principal zymotic diseases, are Small-pox, Measles, Scarlet Fever, Whooping Cough, Diphtheria, Enteric Fever, and Diarrhœa. From this group of diseases there resulted 191 deaths, of which number two cases of Diarrhœa, and one case of Enteric Fever were strangers to the town, leaving a total of 188 cases, representing a zymotic mortality of 1.6 per 1,000 of the population. This is higher than the similar mortality for any year since 1901, it is, however, less than the previous ten years' average. The comparison between England and Wales, and Derby, and the 76 greatest towns is also shown in the table. Each disease will receive separate detailed consideration, and in Table VII. will be found numerous details calling for no special explanation, which have reference to the ward distribution of all the notifiable diseases, and the nature of the isolation, whether treated in hospital or at home.

Smallpox :—

Mortality from Small Pox during the past five years.

Year.	Ten Years' Average.	1902	1903	1904	1905	1906.		
						Derby.	England and Wales.	76 Great Towns.
Rate per 1.000.	0·01	nil.	0·02	0·03	0·02	nil.	0·00	0·00

No case of Small-pox was notified during the year 1906, the last case treated in the wards of the Borough Hospital was discharged on September 29th, 1905.

Vaccination. — I am indebted to Mr. Twigge, Clerk to the Guardians, for the information which has enabled the following table to be continued. It will be noticed that the percentage of vaccinations is the lowest recorded since the year 1898.

TABLE **IX.**—*Showing the percentage of successful Vaccinations in the Borough of Derby for the 11 years 1873-83, and for each year from 1884-1906.*

Year.	Births.	Died un-vaccinated.	Insusceptible and postponed.	Total births less those Dying un-vaccinated.	Successfully Vaccinated.	Percentage of Children Vaccinated.
11 Years 1873-83	31,011	3,767	180	27.241	24,723	90
1884	2,882	356	7	2,526	1,673	66
1885	2,904	337	14	2,567	2,151	83
1886	2,896	328	39	2,568	2,363	92
1887	2.673	281	30	2,392	2.209	92
1888	2,720	306	47	2,444	2,186	90
1889	2,707	314	12	2,393	2,032	84
1890	2,597	289	4	2,308	1,893	82
1891	2.914	368	5	2,546	1.681	66
1892	3.015	428	5	2,587	1,134	43
1893	3,142	420	4	2,722	737	27
1894	2,934	345	2	2,589	453	17
1895	2,941	454	4	2,487	283	11
1896	2,876	406	3	2,470	210	8
1897	2,826	430	1	2,396	145	6
1898	2.869	389	0	2,480	330	13
1899	3.000	475	292	2,525	784	31
1900	2.935	488	78	2,447	432	18
*1901	3.016	419	158	2,597	796	31
*1902	3,277	388	15	2,889	1,137	40
*1903	3.241	377	159	2,867	1,307	46
*1904	3,318	445	125	2,873	1,339	47
*1905	3.129	453	13	2,676	811	31
*1906	3,143	370	29	2,773	407	15

*Added area included.

Mr. W. H. Whiston informs me that the number of exemption certificates granted under the Vaccination Act during the year 1906 to persons resident within the Borough was 289, as compared with 440 in 1905.

Scarlet Fever :—

Mortality from Scarlet Fever during the past five years.

Years.	Ten Years' Average.	1902	1903	1904	1905	1906.		
						Derby.	England and Wales.	76 Great Towns.
Rate per 1,000.	0·13	0·07	0·07	0·03	0·09	0·04	0·10	0·12

The number of cases of Scarlet Fever notified during the year was 290, as compared with 541 in 1905, and 638 in 1904. With the exception of 1903, this is the fewest number of cases notified in any year since 1887. As regards distribution the disease was most prevalent in the Osmaston Ward from which district 51 cases, or about one sixth of the total, were notified. Friar Gate Ward showed an incidence of cases above the average, viz., 31, and in Arboretum, Babington, and Dale Wards there were 20 cases or more of this disease. There were only four deaths resulting from the 290 attacks. This indicates the extreme mildness of the type and represents a mortality of 0.04 per 1,000, which is less than one third of the previous ten years' average, and compares very favourably with a rate of 0.10 in England and Wales, and 0.12 in the 76 great towns. As regards the age incidence of the disease, more than half the cases, or to be exact, 178, occurred among persons aged between 5 and 15 years. The age period 1 to 5 showed the next largest number, 78. Under 1 year of age there was only one case, whilst from 15 to 25 there were 19, and over 25, 14; 161 of these cases were removed to the Isolation Hospital for treatment, and among these were two deaths.

Measles :—

Mortality from Measles during the past five years.

Year.	Ten Years' Average.	1902	1903	1904	1905	1906.		
						Derby.	England and Wales	76 Great Towns.
Rate per 1,000.	0·3	0·33	0·01	0·12	0·37	0·02	0·27	0·40

The mortality from Measles was lower during 1906 than in any year since 1901. There were only two deaths registered, representing a mortality of 0.02 per 1,000 of the population. Comparisons with previous years and with England and Wales are shown in the above summary. Both deaths occurred in the age period—1 and under 5.

Whooping Cough :—

Mortality from Whooping Cough during the past five years.

Year.	Ten Years Average	1902	1903	1904	1905	1906.		
						Derby.	England and Wales.	76 Great Towns.
Rate per 1,000.	0·28	0·25	0·27	0·23	0·17	0·21	0·23	0·28

There were 29 deaths attributed to Whooping Cough, as compared with 20 in the previous year. The rate is slightly below the ten years' average, but is in distinct excess of the rate recorded in 1905. As in previous years the deaths were all among children under the age of five years, and practically half occurred among children under the age of one year. In the year 1905 it was reported that there were fewer deaths in Osmaston Ward than in any of the others, but in the year under review Osmaston Ward shows the greatest mortality from this disease, Kings Mead Ward being the next chief sufferer. No variation has been made in the methods of combating this ailment. Notifications, as in the past, have been received from teachers, and many of the cases have been visited, or a form stating suitable precautionary measures which should be taken, have been forwarded by post to houses where a case has been known to exist.

Diarrhœa :—

Mortality from Diarrhœa during the past five years.

Year.	Ten Years' Average.	1902	1903	1904	1905	1906.		
						Derby	England and Wales.	76 Great Towns.
Rate per 1,000.	0·69	0·39	0·38	0·68	0·61	0·63	0·87	1·16

The deaths from Diarrhœa numbered 78, as against 73 in the previous year. Fifty-six of these deaths were of children under one year of age, whilst 12 others were amongst children under the age of five. The mortality rate is thus 0.6 per 1,000, which is less than the ten years' average, and also considerably less than the rate recorded in the 76 great towns. It is also less than the rate for the country as a whole. In addition to these deaths there were 16 deaths registered as due to Enteritis. The usual preventive measures which have been fully discussed in previous reports have been continued.

Diphtheria :—

Mortality from Diphtheria during the past five years.

Year.	Ten Years' Average.	1902	1903	1904	1905	1906.		
						Derby.	England and Wales.	76 Great Towns.
Rate per 1,000.	0·13	0·10	0·07	0·25	0·19	0·52	0·17	0·19

During the year 1906 there were notified 562 cases of Diphtheria, among which there were 64 deaths; the death-rate was, therefore, equal to 0.52 per 1,000. This rate of mortality is considerably higher than the rate of previous years and than that recorded in

England and Wales and the 76 great towns. The increase is due both to increased prevalence and to an increase in the fatality of the cases; in 1905 the case fatality was 8.3 per cent., in 1906 it was 11.3.

The age distribution of the notified cases and the resulting fatal cases shows that

under 1 year of age there were 4 cases with 1 death,
between the ages of 1 & 5 ,, 121 ,, 26 deaths,
,, ,, 5 & 15 ,, 356 ,, 34 ,,
,, ,, 15 & 25 ,, 43 ,, 2 ,,
,, ,, 25 & 65 ,, 37 ,, 1 ,,

and over the age period 65 there was one case which recovered. The most dangerous age period is, therefore, 1-5, no fewer than 22 per cent. of the cases occurring among children at this age proving fatal. At the next age-period there is observed a marked decline in the fatality though Diphtheria is still a dangerous disease, and causes a fatal issue in 10 per cent. of attacks. At other age-periods it becomes notably a less severe matter, the age of infancy excepted. The incidence of cases on children under twelve months of age is so small that it would be unwise to make any deductions, but probably the consideration of a large number of cases would show that attacks on infants are exceedingly fatal.

The distribution of the cases shows that the disease was prevalent throughout the whole town. The ward distribution of notified cases and those resulting fatally being as follows:—

Ward.	Cases.	Deaths.
Abbey	32	5
Arboretum	20	2
Babington	40	6
Becket	23	3
Bridge	21	4
Castle	33	5
Dale	47	8
Derwent	31	7
Friar Gate	58	2
Kings' Mead	35	1
Litchurch	34	4
Markeaton	58	6
Normanton	36	4
Osmaston	40	0
Pear Tree	18	4
Rowditch	36	3

It will be observed that in the Osmaston Ward there were 40 cases notified but no deaths ensued, and also in Friar Gate Ward with the largest number of notified cases (58) there were only two deaths, whereas in Derwent Ward there were seven deaths among 31 cases, and in Dale Ward eight deaths among 47 cases.

In the Report for 1905 I discussed at some length the reasons for this excessive prevalence of Diphtheria, and I showed that this disease apparently attacked towns in a peculiar manner, taking a period of about four years for the cases to increase from normal to a maximum with the subsequence decline to normal.

The increase in Derby began about the end of 1904, and continued throughout 1905, and now the year 1906 shows a further increase over the previous years. I showed that judged by the death-rate, in the period for which statistics are available, Derby had had a previous four years' excessive prevalence, namely, from 1889-1892.

The causes of this increase were attributed to the following factors. (1) Conditions relating to the increase in virulence of the infection, or to causes tending to increased susceptibility of persons to attack, but what such conditions or causes might be it was impossible in our present state of knowledge to precisely define, and (2) circumstances which contribute directly to the extension of the infection. Such conditions were the following:—(*a*) The large number of unrecognised cases which are always to be observed in epidemics of infectious diseases, (*b*) the influence of school attendance which operates by means of the continued presence at school of the above unrecognised cases, or of cases in which the throat of a patient after attack may continue to harbour the infection causing him to become a carrier and distributor of infection for a varying length of time. It will be recognised that schools present special facilities for the operation of these two causes, and (*c*) the insufficiency of isolation, both as regards the number of beds available for hospital treatment and the defective character of the home isolation, which has been so frequently observed.

These conditions have all been in operation during the past year, and the work of dealing with these cases has not resulted in any material alteration in the opinions then expressed as to the causes which have contributed to the extension of the disease.

Increased use has been made of the facilities for bacteriological examination, and 214 swabbings have been examined of which number 50 were taken to confirm the diagnosis, and in respect of which a positive report was received in 27 cases; whilst 164 swabbings were examined to ascertain whether a patient was still acting as a carrier; in these instances positive reports were received in 44 instances, and negative in 120. These latter cases emphasise the importance of the bacteriological test in helping to arrive at a decision as to convalescence; this shows that out of 120 cases which were considered to be quite well, there were Diphtheria bacilli to be found in 44.

Increased use has been made of the offer to supply antitoxin free to patients who might be unable to pay for the same. Under this rule 197 vials of antitoxin, each containing 2,000 units, were supplied free of charge.

Enteric Fever :—

Mortality from Enteric Fever during the past five years.

Year.	Ten Years' Average.	1902	1903	1904	1905	1906.		
						Derby.	England and Wales.	76 Great Towns.
Rate per 1,000.	0·16	0·12	0·06	0·05	0·08	0·10	0·09	0·09

There were 70 cases of Enteric Fever notified during the year as compared with 40 in 1905. Eleven of these cases proved fatal, which represents a death-rate of 0.10 per 1,000, as compared with 0.08 in the previous year. This rate is slightly higher than that recorded either in England and Wales or the 76 great towns, but is well below the ten years' average. The greatest number of cases was reported in Derwent Ward, no fewer than 13 being from that district. The excessive incidence of cases on this ward was due to a localised outbreak at the Cemetery end of the Nottingham Road, and in this outbreak personal infection played a considerable part. In Becket, Osmaston, Pear Tree, and Rowditch Wards, only one case was reported. The age incidence of the disease shows that persons between 25 and 65 are most liable to be attacked, 32 cases being notified among persons at that age period. There were none among persons over 65 years of age, and the number diminished from 25 downwards.

The usual table which attemps a classification of the causes of the disease is appended, and it will be seen that the number of instances in which gross defects were discovered was proportionately less than in previous years. Enteric Fever has been described, and rightly so, as a filth disease, and it follows that the greatest importance must be attached to the association of insanitary conditions in these outbreaks. Take for instance one aspect of this case, the accumulation of offensive material near houses. This results in two obvious dangers, one, the fouling of the air, and second, the danger resulting from particles of offensive matter becoming air-borne. The fouling of the air by offensive privies—these being the chief cause of complaint—resu'ts in persons living in the neighbourhood of these abominations breathing air of considerably less value than their more fortunate neighbours who have efficient sanitary conveniences attached to their houses. The air is robbed of a certain amount of active oxygen, and at the same time becomes loaded with products of a deleterious nature, causing persons who are compelled to breathe such an atmosphere for considerable portions of their lives to develop a physique which, I think, is less able to resist infection when such is introduced into the system than persons who are more fortunately circumstanced. The direct danger is at least two-fold; particles of excretal matter may become detached from the general mass, this dries and perhaps becomes sufficiently finely pulverised to allow it to be disseminated as dust, it then gains access to the house by the various air currents and, may be, finds a resting place on some article of diet. If such dust contained the germs of a specific disease, the person taking it into his system runs a considerable risk of having an attack of the disease. Again the question of association of house flies and disease, particularly of the intestinal type, has received much attention. It is obvious that the fly in its peregrinations outside a house may readily contaminate itself from various sources, and the facilities for this contamination are multiplied where privies exist. If the contamination contains the germs of a specific disease, it requires no great effort of imagination to recognise how disease may follow the alighting of the insect on some article of diet. If for no other reason than the above, privies—of which there are a large number in Derby—should be abolished as quickly as may be practicable,

TABLE X.—An Analysis of the Cases of Enteric Fever notified during the year 1906.

A.—*Cases in which Sanitary defects were prominent.*

Progressive No.	Age	Sex	Sanitary Conveniences.				Nuisances.	Remarks.
			W.C.	Pail.	Privy.	Privy. Cesspool.		
67	8	F.	..	..	1	..	Defective trapping of drains.	Notice served to remedy defect.
91	18	F.	..	1	..	..	Untrapped drain. Defects at place of work.	Notice served to remedy defect.
100	17	F.	..	..	1	..	Note fair privy and ashpit.	House required cleaning.
193	29	M.	..	..	1	..	Defective drainage to adjoining premises.	Drank water which had been standing for some time in a public place.
332	20	M.	1	..	..	..	Defective sanitary conveniences at place of work.	
343	23	F.	..	1	..	..	Eight tub closets in yard.	Special pail provided for infected excreta.
390	32	F.	..	1	..	..	Tub closets near to house.	
458	28	F.	1	..	..	..	Drains choked.	Complained of smells during the cleaning of several empty houses.
785	13	F.	..	..	1	..	Defective sanitary conveniences	Notice served to remedy defects.
802	28	M.	..	..	1	..	Softwater pump out of order.	
839	20	M.	..	..	1	..	Defective privies and drains.	Notice served.
932	32	F.	..	..	1	..	Defective privy, etc.	Notice served to remedy defects
958	29	F.	..	..	1	..	Offensive sanitary conveniences.	

Cases in which direct infection was possible.

Progressive No.	Age	Sex	W.C.	Pail.	Privy.	Privy. Cesspool.	Nuisances.	Remarks.
382	10	F.	..	1	..	..		From a case of ambulatory Typhoid. Original case gave positive reaction. Widal.
382a	4	M.	..	1	..	..	.. ..	Brother of above case—not notified—died shortly after admission to Children's Hospital
382b	2½	M.	..	1	..	..	.. ..	Brother of above. Blood gave a doubtful reaction.
834	30	F.	1	..	..	..	.. ..	Had been nursing Enteric Fever.
847	29	F.	1	..	..	..	.. ..	Helped to nurse cases 634 and 710.

Progressive No.	Age	Sex	Sanitary Conveniences. W.C.	Pail.	Privy	Privy Cesspool.	Nuisances.	Remarks.
964	35	F.	1	..	..	..	.. ..	These three cases were probably infected by an un-notified case, the blood from which gave positive result. Widal.
973	1½	M.	1	..	..	..	.. ..	
979	7	M.	1	..	..	..	.. ..	
993	3	M.	1	..	..	..	.. ..	Playmate of above case.
1036	5	F.	1	..	..	..	.. ..	Sister of case 922.
1040	22	M.	1	..	..	..	.. ..	Brother of case 956.

Infection associated with Article of Diet.

Progressive No.	Age	Sex	W.C.	Pail.	Privy	Privy Cesspool.	Nuisances.	Remarks.
862	51	M.	..	..	1	..	Privy and ashpit five yards from house.	Partook freely of watercress but note also insanitary condition.
950	9	F.	1	..	..	..	.. ..	Partook freely of uncooked mussels.
1033	24	F.	1	..	..	..	.. ..	Frequently partook of mussels.

Cases in which Infection may have been contracted whilst visiting other towns.

Progressive No.	Age	Sex	W.C.	Pail.	Privy	Privy Cesspool.	Nuisances.	Remarks.
697	10	F.	1	..	..	..	.. ..	Recent visit to Westmoreland.
698	24	M.	1	..	..	..	.. ..	Recent visit to Staffordshire.
710	8	M.	1	..	..	..	.. ..	Derbyshire village for holidays.
714	6	F.	1	..	..	..	.. ..	One week in Westmoreland.
741	21	F.	..	1	..	..	.. ..	Work is out of Derby.
747	42	M.	1	..	..	..	.. ..	Various places for holidays.

Other Cases.

Progressive No.	Age	Sex	W.C.	Pail.	Privy	Privy Cesspool.	Nuisances.	Remarks.
102	15	F.	1	..	..	..	.. ..	No suggestion as to origin of infection.
121	29	F.	..	1	..	..	Note pail closet.	
141	47	F.	1	..	..	..	.. ..	No suggestion as to origin of infection.
147	27	F.	1	..	..	..	New drains recently.	,, ,, ,,
211	5	F.	1	..	..	..	.. ..	,, ,, ,,
268	44	F.	1	..	..	..	Offensive Street gully.	
522	36	F.	1	..	..	..	.. ..	
524	15	M.	1	..	..	..	.. ..	Drank water out of Markeaton Brook.
590	44	M.	..	1	..	..	Iron traps to drains.	

Progressive No.	Age	Sex	Sanitary Conveniences.				Nuisances.	Remarks.
			W.C.	Pail.	Privy.	Privy Cesspool.		
634	39	M.	1	..	..	..	.. ..	New drains to house.
700	30	M.	1	..	..	..	.. ..	No suggestion as to origin of infection.
701	39	M.	..	..	1	..	.. ..	Tried to commit suicide in canal at Leicester. Illness followed
708	30	M.	1	..	..	..	.. ..	No suggestion as to origin of infection.
735	15	M.	1	..	..	..	.. ..	Engaged cleaning drains.
759	14	F.	..	1	..	..	.. ..	Various other ailments.
773	15	M.	1	..	..	..	.. ..	No suggestion as to origin of infection.
784	34	F.	1	..	..	..	.. ..	,, ,, ,,
797	23	F.	1	..	..	..	.. ..	Patient's sister suffered from Enteric about 9 years ago in this same house.
798	30	F.	..	1	..	..	.. ..	Infection not traced.
809	29	F.	1	..	..	..	.. ..	,, ,,
822	36	M.	1	..	..	..	.. ..	
824	12	F.	..	1	..	..	.. ..	Infection not traced.
832	9	M.	1	..	..	..	.. ..	,, ,,
833	63	F.	1	..	..	..	.. ..	New w.c.'s. Infection not traced
850	37	M.	1	..	..	..	.. ..	Infection not traced.
882	29	F.	1	..	..	..	.. ..	No complaints.
883	3	M.	1	..	..	..	.. ..	,, ,,
887	23	M.	1	..	..	..	.. ..	,, ,,
900	7	F.	1	..	..	..	.. ..	Complained of unpaved Street.
922	15	F.	1	..	..	..	.. ..	,, ,, ,,
927	32	M.	1	..	..	..	.. ..	No complaints.
929	6	F.	1	..	..	..	.. ..	,, ,,
951	28	F.	1	..	..	..	.. ..	Suffered also from Influenza.
956	25	M.	1	..	..	..	.. ..	No complaints.
968	18	M.	..	1	..	..	.. ..	
990	55	F.	..	..	1	..	.. ..	
991	2½	M.	..	1	..	..	.. ..	
1048	6	F.	1	..	..	..	.. ..	Recently recovered from Diphtheria.
1067	37	F.	1	..	..	..	.. ..	

A large number of cases were reported in which no defects of any kind were discoverable, and where it was impossible to associate the illness with any existing attack. Such cases are, of course, unsatisfactory to the investigator.

The number of attacks associated with the ingestion of food was not numerous, neither were those cases in which it seemed possible that the infection was received outside the town, but as in past years there was a fairly large number due to direct infection. Three instances of this class which illustrate the dangers to be apprehended from Enteric Fever are worth recording.

Mrs. T., who resides in one of the Courts off King Street, was attacked with an illness sometime at the end of February, from which she had perfectly recovered at the end of about 7 weeks. When convalescent, her son, Thomas M., aged 2½ years, fell ill, was taken to the Children's Hospital, and died twelve hours after admission without any very definite history. On 26th March, another son, Patrick T., aged 4 years, was attacked with illness, and taken to the Children's Hospital. On 5th April the blood of this patient was examined and reported upon as giving a doubtful typhoid re-action. On April 18th a daughter, Mary Agnes T., aged 10 years, was taken to the Children's Hospital, admitted as an in-patient, and the blood from this patient was forwarded for examination on 28th April, and was found to give a typhoid re-action. In investigating the case I came to the conclusion that the mother of these children had probably suffered from Typhoid Fever in February, and the fact that the blood specimen which I took on 3rd May gave a positive result corroborated my opinion. These cases were probably infected in sequence, and the fact that the incubation period of Enteric Fever is rather protracted and the early symptoms somewhat indefinite, accounts for the long duration of the infection of this particular house.

On 28th November a case of Enteric Fever was notified in the person of a woman, aged 35 years, named Mrs. W. In investigating this case I discovered that one of her children, aged 3 years, had been ill with indefinite symptoms during the previous six weeks. I was permitted to take a sample of blood for examination as to the typhoid re-action, and the report stated that the serum gave a typhoid re-action. On December 1st a further case of Enteric Fever was notified from this house, it was of a child aged 1½ years, and on 3rd December a boy aged 7 years was also notified, whilst on the 6th a certificate was received stating that Ernest A., a playmate of the first of the above cases, was also suffering from Enteric Fever. This series emphasises the undoubted risks which obtain from the existence of Typhoid Fever in an unrecognised form under conditions favourable for its extension.

The following is the history of an outbreak of Enteric Fever in a family consisting of a father, mother, and six children, four being girls aged respectively 15, 13, 7, and 5, and two boys aged respectively 4 years and 9 months. Early in October the boy aged 4 fell ill and was treated at home. I was not permitted to take a sample of blood for examination, but the case was not considered to be one of Enteric Fever. The girl aged 15 years was notified on November 17th as suffering from Enteric Fever, she had then been admitted to the Infirmary for treatment. On December 20th the girl aged 5 years was notified as suffering from the same disease. she had then been ill three weeks, and had only recently called in medical advice. This patient was treated at home throughout the whole course of the disease. Another girl aged 8, on the occurrence of the last case, was sent to reside with friends away from home. She returned on January 11th, she had evidently been infected before leaving the house, for when she was taken to the Children's Hospital on January 12th, she was recognised to be suffering from Enteric Fever and was admitted as an in-patient. On February 12th, the mother of these children was notified as suffering from Enteric Fever and removed to Hospital for treatment. On 26th March another girl, aged 12 years, was taken to the Children's Hospital and admitted suffering from the same disease. These are probably cases of direct infection, and the period of time covered by the series is of a most unusual length.

The three series of cases emphasise the importance of every precaution being adopted in outbreaks of this particular disease. The idea which is held in many homes that Enteric Fever is not a disease which is capable of much power of extension should be dispelled by the knowledge of the circumstances attending these three outbreaks.

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Puerperal Fever.—There were 11 cases of this disease notified, among which there were three deaths, as compared with 13 notifications in the previous year and four deaths. The cases were notified from Dale and Derwent Wards, three each, two from Normanton, and one each from Abbey, Litchurch, and Markeaton Wards. The usual precautionary measures have been continued; they include the disinfection of the clothing of the midwife in attendance on the case, and also the disinfection of the midwife's residence. In cases where it appeared desirable, the midwife was requested to refrain from attendance on any other cases for a stated period.

Midwives' Act, 1902.—In accordance with the requirements of the Midwives' Act, 60 women who were registered as midwives gave notice of their intention to practice as such within the boundaries of the Borough. This is an increase of two on the previous year. Fifty-nine records of midwives having had to send for medical assistance were received, and the number of still-births reported was 23. The circumstances which called for the censure of a midwife by a Coroner's Jury was made the subject of an investigation by the Sanitary Committee, acting as the Local Supervising Authority under the Act. The Committee decided to forward the particulars to the Central Midwives' Board. This Board, after a consideration of all the evidence in the case, "resolved not to remove the name of the midwife from the roll, but to censure severely."

The more common faults which have had to be found with midwives have been the failure to keep accurate records of the cases attended, failing to notify still-births, and the fact of having had to send for medical help. Perhaps the reason for these particular shortcomings is to be found in the deficient education which is possessed by many of them. Neglect of sufficient care as regards the cleanliness of various appliances has not infrequently been observed. With the exception of the case above referred to, it has not been found necessary to take any serious action under the Act.

Influenza.—Influenza, though an undoubtedly infectious ailment, is not a notifiable disease, and on that account the only information which is available as to prevalence is to be gained from the death returns. This was the registered cause of death in 27 instances as compared with 21 in the previous year. The largest number of deaths 10 was registered in the age-period—25-65. The deaths of five children under one year of age were attributed to this disease, as compared with four in 1905. Deaths from influenza were recorded in every ward except Derwent, Kings' Mead, Litchurch, and Markeaton. The largest number registered in any one ward was five, and this total was reached in both Normanton and Pear Tree Wards.

Cancer.—Cancer or some variety of malignant disease was held responsible for 92 deaths. Below the age of 25 years it was the cause of only one death. Sixty-five of the deaths occurred between the ages of 25 and 65, and 26 from 65 upwards. As regards the distribution of these cases, in only one ward did the total reach double figures, viz., 10 in Abbey Ward. There was only one death in Becket Ward, and two in Derwent Ward attributed to malignant disease.

Respiratory Diseases.—The two principal diseases in this group are Bronchitis and Pneumonia, and both these diseases are responsible each year for a considerable number of deaths. Bronchitis is most fatal at the extremes of life; 23 deaths of infants under one and 65 deaths of persons over 65 years of age were registered, so that in these two age-periods there occurred more than half the deaths. The largest number of deaths (20) occurred in Kings' Mead Ward.

As regards pneumonia, 30 out of the 77 cases occurred under the age of five years.

Violence.—In 51 instances death was attributed to violence, 36 of these cases were accidents, and 15 were cases of suicide. One fourth of the accidental deaths were of children under the age of five years, and 15 occurred among persons at ages 25 to 65; the period of activity when risks whether occupational or otherwise, are most common. All the cases of death self-inflicted were of persons between the ages of 25 to 65; as regards these 15 deaths, 14 were of males. Eleven of the deaths were caused by hanging, and this was the mode of death chosen by the one woman. Five of the deaths occurred in Rowditch Ward.

Tubercular Diseases.—It is considered that in no disease do preventive measures offer such expectation of success as in the case of tubercular diseases. The life history of the infecting organism, its behaviour under varying conditions, such as exposure to sunlight, viability in dust and places where light is defective, the manner of its dissemination as by the sputum of infected persons, and the milk of infected cows, and the special peculiarities of the human body which would apparently render it less resistant to attacks by the infection have all received the attention of bacteriologists and sanitarians. The result of this accumulated work has been to place preventive measures directed against the spread of this disease on a sound and scientific basis, and every community is now actively engaged in an attempt to lessen the mortality from this, the greatest danger, to which dwellers in this country are exposed. For many years we have been engaged in this work in this town, and I think not without success in certain directions. The two main objects which we have had in mind have been (1), to prevent the spread of Phthisis and (2), to minimise the dangers resulting from the sale, and subsequent consumption as food, of specifically infected milk. In respect of the first of these divisions two main possibilities are borne in mind, and they are, firstly to improve the resisting powers of each individual against infection, and secondly, to limit the amount of infection set free. The former of these it is hoped to attain by remedying the conditions which tend to lower vitality, and this consists in an attempt to ensure each person having a sufficient supply of pure air and sunshine. It is obvious that this end can only be slowly reached, but if it be constantly borne in mind as the ideal to be attained much good will ensue. The limitation of air-borne infection is effected chiefly by the acquirement of the knowledge of the existence of cases, and the subsequent education of the sufferer in the precautions which, in the interests of the public, he should adopt; unaggressive visitation, and conciliatory supervision to see that the suggestions are being loyally carried out are of great value.

Since 1902 cases of Phthisis have been what is known as voluntarily notifiable. A medical man has under treatment a case of this disease, and if he considers it desirable, he notifies the fact to the Medical Officer of Health. In some instances the fact of the existence of the disease is notified with a request that no official from the Health Department should visit, such a request is loyally observed. After receipt of a notification an inspector visits, and obtains certain information respecting the case, such details including the size of the family, conditions relating to residence and work, the family history of the patient, known exposure to infection, desirability of disinfection of premises, and many other points. Suitable precautions are suggested, and, if necessary, spitting cups are lent. The case is then transferred to the women inspectors and nurse, and arrangements are made for systematic visitation. These visits are not made so frequently as to become irritating, neither are they so seldom as to give the patient time to forget his directions. I have often heard thanks for these visits, and on no occasion has dissatisfaction been expressed. If during the course of the disease it appears that any carelessness has been displayed in disposing of the infected sputum, disinfection is discreetly suggested and generally permission is obtained. At the termination of the case nearly every infected house is disinfected, first by burning sulphur, and after that by a liberal application of soap and water, and in some instances, by scraping the walls of the infected room. This then represents the outline of measures which are intended to limit the spread of infection. The improvement of physique is, as has been stated, a slower matter, and the chief new work in this respect has been the systematic investigation of the condition of all houses which are unprovided with means of through ventilation. Phthisis is undoubtedly a disease which is influenced by home conditions, and this step seems, therefore, distinctly to be indicated. The particulars of this work are set out under the heading of "Housing of the Working Classes." This is simply additional to what has been previously reported upon, and which still continues to receive attention, viz., the opening up of courts where necessary to improve external ventilation, the occasional closing of houses which cannot be rendered fit for habitation, the prevention of overcrowding, and the removal of objectionable conditions which may be discovered in the neighbourhood of habitations.

As regards the prevention of the dissemination of infection by milk, this work was stopped for a time pending the publication of the report of the Royal Commission on Tuberculosis. The publication of this report, which emphasises the possibility of human beings being infected by partaking of cows' milk specifically infected, was immediately followed by a resumption of this work. A reference to this subject is made under the heading "Infantile Mortality."

The deaths from Phthisis during the year under review numbered 113, as compared with 96 in 1905, an increase, therefore, of 17. All other tubercular diseases, which include Tabes Mesenterica, Tubercular Meningitis, Scrofula, and the remaining diseases of tubercular origin numbered 56 against 61 in 1905, and 64 in 1904—a slight decline. This year, therefore, shows a break in the progressive decline which has now been going on for several years. It is, however, only slight, and is not a cause for discouragement.

I have in previous reports referred to the favourable reception which the medical practitioners of this town have accorded to the system of voluntary notification of Phthisis, which was started in 1902, and it is a source of satisfaction to be able to report that all cases are being notified which medical men are of opinion in the interests of the public health should be visited by an official of the Health Department.

The following table shows the number of notifications received each year since notification has been practised:—

Year.	Private Practitioners.	Institutions.	Poor Law Cases.	Total.
July 1st to Dec. 31st, 1902.	35	16	5	56
1903.	35	62	8	105
1904.	37	56	10	103
1905.	32	41	9	82
1906.	43	62	6	111

The total notifications this year are in excess of those in previous years, this is particularly noticeable in both the numbers received from private practitioners and those from institutions. This, of course, does not mean that the number of cases of Phthisis is increasing, it is simply the fact that a larger number is being brought to the knowledge of the Medical Officer of Health, and the more complete such knowledge is, the more complete are the precautionary measures taken. The ward distribution of cases was as follows:—

	Cases Notified	Deaths.		Cases Notified	Deaths.
Abbey	10	7	King's Mead	5	11
Arboretum	4	8	Litchurch	6	6
Babington	4	10	Markeaton	9	11
Becket	5	3	Normanton	11	5
Bridge	2	6	Osmaston	6	6
Castle	13	7	Pear Tree	10	7
Dale	5	5	Rowditch	9	7
Derwent	3	4			
Friargate	9	10	Totals	111	113

The largest number of cases was reported from Castle Ward, though the deaths were most numerous in Kings' Mead and Markeaton Wards. The former of these two wards almost always has the highest Phthisis mortality. As has been previously pointed out, the only constant feature in this table is the unenviable position which Kings' Mead Ward occupies, the other wards show constant variation, due in great part to the fewness of the annual totals.

The age incidence of persons attacked and notified in 1906 is shown in the subjoined table, as also is the age at death of the fatal cases registered during 1906.

	All ages.	0-15	15-25	25-45	45-65	65 upwards.
Males	73	5	23	25	19	1
Females	38	6	10	16	6	0
Total	111	11	33	41	25	1
Deaths (both sexes) from phthisis	113	4	19	88		2

The notifications of males, it will be observed, are nearly twice as numerous as of females; in some age-periods there is an even greater preponderance of males, the one exception is the age-period 0.15 when the numbers are approximately the same. The number of specimens of sputum sent up for bacteriological examination was 12, of these 7 gave a positive result.

Enquiries have been made into the occupation followed by the patients, and the information thus obtained has been tabulated in the subjoined table. There has been some variation from the results obtained last year, but in no class is there any special incidence observable. The textile workers contributed 12 cases, as against five in the previous year; labourers 14, as against four; and clerks six, as against three in the previous tabulation.

Textile Workers.

Surgical Bandage Maker	3
Net Maker	1
Hosiery Workers	4
Various Winders	4
Total	12

Labourers.

Bricklayers'	4
M.R. Co.	3
Various	7
Total	14

Indoor Occupation.

Printer and Compositors	3
Tailors and Tailoresses	3
Bootmaker (Machine)	2
Cabinet-making and Upholstering	2
Baker	1
Grocer	1
Bicycle Maker	1
Total	13

Workers in Wood, Stone, and Metal.

Stonemasons	2
Coach-builders	2
Fitters	3
Moulder	1
Brassworker	1
Rivetter	1
Boiler Maker	1
Millwright	1
Total	12

Clerks.

Total	6

Domestic Duties.

Housewives and Domestic Duties	16
Charwomen	2
Sewing at home	1
Total	19

School Children.

Total	11

Other Occupations.	
Packer	1
Rag Gatherer	1
Fireman	1
Engine Driver	1
Cellarman	1
Hawker	1
Stable Lad	1
Flower Seller	1
Boots at Hotel	1
Soldiers	2
Bricklayers	2
Indoor Postman	1
Gas Furnace-man	1
Total	15
Grand Total	102

In investigating these cases an attempt is always made to ascertain the source of infection, but in only a very few instances is this really possible. There are cases, as in the first series, where a phthisical person has lived under the same roof as the case under investigation, and here it would appear probable that the first was the source of the origin of the second case. In other instances the various series simply resolve themselves into predisposing causes except perhaps series 3, and these cases if they actually received their infection from the source suggested ought really to be classified amongst the first series. How far a bad family history of Phthisis is to be regarded as a predisposing cause is not quite clear, the idea at the present time apparently being that the actual transmission of tubercular infection from mother to offspring is a matter of extreme rarity, but that transmission of a constitution readily prone to attack is the chief factor. Occupation has always been regarded as an important element in predisposing to this disease. Occupations in which work is carried out under unfavourable conditions as to ventilation strongly predispose, as also do many dusty occupations, particularly if the particles of dust are of an irritating character, as in the trade of stone masons, and metal workers of various kinds, ocupations resulting in exposure to weather, particularly if the constitution is not well supported, must be a potent predisposing cause, and hence the labourers of various kinds contribute considerable numbers to the male mortality from Phthisis. As in past years Phthisis seems to have frequently followed an attack of illness; among children Measles and Whooping Cough have been the chief of these illnesses, and among adults Influenza.

SERIES 1.—**Probably direct infection.**

Case 10.—This patient's wife is suffering from Phthisis. She was the first to show signs of the disease.

Case 17.—This patient has had a fairly hard struggle, and was probably infected by a sister who died two years ago. Other near relatives have died from the disease,

Case 24.—Occupation necessitates exposure to changes of weather. Brother died in 1905 from Phthisis. This disease was also the cause of death of paternal grandmother.

Case 28.—Boy aged nine years, whose father died from Phthisis two years ago.

Case 31.—Uncle of this patient resides in same house and is now suffering from Phthisis. Another relative of this patient died of the same disease about five years ago.

Case 49.—Patient aged 17 years. Brother died six months ago, and father 18 months ago, both from Phthisis. Patient was engaged in a textile mill.

Case 56.—Worker in textile factory. Father died 2½ years ago from Phthisis.

Case 69.—This patient nursed her step-daughter through an attack of consumption which terminated fatally 15 months ago.

Case 87.—Both father and mother died from Tuberculosis, the former with a throat infection, and the latter in the lungs

Case 93.—Sister Phthisical at present time.

Case 96.—This patient slept with his brother who died from Phthisis about three years ago. Has had a hard life.

Case 115.—Brother died from Phthisis less than three years ago. This patient works in a textile factory, is delicate, has suffered from Enteric and Scarlet Fevers, Measles, Jaundice, etc.

Case 116.—Nursed stepson through illness three years ago.

SERIES 2.—**Cases characterised by a marked family history of Phthisis, but no recent contact with such cases.**

Case 9.—This patient suffered from Pneumonia in 1905. Her mother died of Phthisis several years ago.

Case 20.—This patient's brother has recently been discharged from the navy suffering from Phthisis. Their mother died of consumption 12 years ago.

Case 26.—Several uncles and aunts of this patient and step-brother and his grandmother all died consumptive. Patient is a clerk in offices where other cases are said to exist.

Case 27.—Several aunts have died Phthisical.

Case 32.—Brother died of the disease four years ago.

Case 33.—Mother died of Phthisis 4½ years ago, but beyond an occasional visit was not much in contact. Maternal aunt also died of this disease.

Case 41.—Patient aged 15 years. Mother's father and brother were consumptive. Patient is an ironworker.

Case 45.—Relatives of father have suffered from this disease. Illness apparently followed an attack of Measles and Pneumonia.

Case 53.—Brother and sister died of the disease 12 years ago.

Case 59.—Mother died Phthisical 20 years ago, and husband from the same disease 8 years ago.

Case 61.—Mother died from same disease many years ago.

Case 65.—Brother died of Consumption 10 years ago, previous to which an aunt and uncle had similarly suffered.

Case 72.—This is sister of Case 93, and first to show symptoms.

Case 74.—Mother died of Phthisis eight years ago, as also did a maternal aunt.

Case 75.—Two paternal aunts died of Consumption. Patient a boiler maker.

Case 76.—Sister died of Consumption nine years ago. Patient is much exposed to changes of weather, and is also of irregular habits.

Case 77.—Mother died 12 years ago of Consumption.

Case 83.—Brother died 13 years ago of Consumption.

Case 105.—Brother, sister and father of this patient are said to have died consumptive.

Case 121.—Consumption was cause of this patient's mother's death.

SERIES 3.—Notifications received of persons who have been in frequent contact with individuals known to be suffering from Phthisis.

Case 8.—Lodger in a house where a case of Phthisis is said to be under treatment.

Case 14.—Two cases are under treatment at the next house to that in which the patient resides.

Case 25.—Said to be other cases of Phthisis in the office in which the patient is employed.

Case 26.—As for Case 25.

Case 46.—This patient's employer is said to be Phthisical

Case 82.—Other cases of Consumption have been reported from among the employees at the works where this patient is engaged.

Case 92.—As for Case 82.

SERIES 4.—Cases in which the nature of the occupation has been suggested as a predisposing cause.

Case 1.—Clerk.

Case 2.—Labourer at different places. Risks of exposure considerable.

Case 5.—Textile factory. Good personal habits, but poor physique.

Case 6.—Occupation in which dust is produced. Upholsterer.

Case 7.—Printer.

Case 11.—Compositor. Some family history of Phthisis.

Case 16.—Fitter's labourer. Iron particles might be inhaled.

Case 34.—Stone Mason. Frequent cause of Phthisis.

Case 37.—Bricklayer. Complains of strains from lifting weights.

Case 39.—Cabinet Maker. Delicate phisique.

Case 40.—Compositor. Confined occupation.

Case 50.—Textile worker. Threadwinder

Case 52.—Textile worker. Hosiery.

Case 57.—Soldier.

Case 58.—Bricklayer's labourer. Much exposed.

Case 60.—Grocer. Cough every winter for some years past.

Case 62.—Stone Mason. Frequent cause.

Case 63.—Textile worker. Net making.

Case 67.—Bricklayer's labourer. Had several severe accidents.

Case 71.—Labourer at Skin yard. Very damp work.

Case 73.—Gas furnace man. Exposed to extremes of temperature.

Case 79.—Textile worker. Weaver.

Case 80.—Tailor. No previous illness of this type has been reported from this workroom.

Case 86.—Bootmaker. Some family history of Phthisis.

Case 91.—Textile worker. Hosiery.

Case 94.—Indoor postman. Said to have fairly heavy work ; liability to contract colds from changes of temperature.

Case 95.—Textile Worker. Winder. Had whooping cough last year.

Case 97.—Labourer.

Case 99.—Bricklayer. Exposed to wet and got repeated colds.

Case 101.—Labourer now. Soldier six years ago. Foreign service, India.

Case 104.—Labourer. Carriage washing. Several illnesses.

Case 106. Fitter.

Case 108.—Brassworker, also suffered recently from various illnesses, Pleurisy and influenza.

Case 112.—Baker.

Case 114.—Labourer, leadwork. Said to be heavy work.

Case 117.—Builder's labourer.

Case 119.—Ironworker. Close dusty work.

SERIES 5.—Cases following illness.

INFLUENZA.

Case 30.—Suffered from Influenza January 3rd, 1906, and Appendicitis a short time previously.

Case 35.—Illness dates from an attack of Influenza a few years ago, since which time patient has suffered from Cough and Bronchitis.

Case 98.—Influenza two years ago. Cough since. Pneumonia three months ago, and Pleurisy more recently.

Case 102.—Influenza six months ago.

PNEUMONIA.

Case 104.—The patient has suffered from Pneumonia, and more recently Jaundice.

ZYMOTIC DISEASES.

Case 12.—Girl aged four. Measles followed by Pneumonia 8 months ago.

Case 21.—Girl, Aged 7, Pneumonia, July, 1904, and whooping cough in November, 1905.

Case 45.—Girl aged five. Measles and Pneumonia three years ago, left child with constant cough.

Case 66.—Youth aged 14. Enteric Fever eight years ago.

Case 95.—Young woman aged 21 years, who dates her illness as commencing with an attack of whooping cough in 1905.

VARIOUS.

Case 13.—Has been twice operated upon for Appendicitis.

Case 29.—Boy aged six years. Delicate from birth.

Case 45.—Youth aged 15.—Tubercular disease of hip.

Case 54.—" Diseased joints."

Case 78.—Steady person, but has always suffered from " Chest Weakness."

Case 90.—Poor physique. This patient has suffered practically all her life, and with abscesses.

Case 113.—Trained athlete, who has frequently contracted colds and chills in training, and to this is attributed present attack.

SERIES 6.—Exposure as a predisposing cause.

Case 4.—Work has constantly exposed him to changes in weather.

Case 18.—Has not been steady. Hard drinker. Hawker.

Case 68.—Travelled about the country and frequently had to sleep out. Not a robust constitution.

Case 88.—Very unsteady. Rag gatherer. Life has been a great struggle.

Case 107.—For 25 years a soldier. 17 in India. No regular occupation since. At completion of military service was engaged in a very dusty occupation. Metallic particles inhaled.

Series 7.—**Persons engaged only in domestic duties.**

Case 19.—No cause for onset of symptoms suggested. Delicate constitution.

Case 22.—No cause for onset of symptoms suggested. Very poor.

Case 23.—No cause for onset of symptoms suggested. Ill since child birth four years ago.

Case 36.—No cause for onset of symptoms suggested.

Case 44.—No cause for onset of symptoms suggested.

Case 55.—No cause for onset of symptoms suggested, except frequent colds.

Case 81.—No cause for onset of symptoms suggested. Delicate constitution.

Case 84.—No cause for onset of symptoms suggested.

Case 85.—No cause for onset of symptoms suggested.

Case 109.—No cause for onset of symptoms suggested.

Case 118.—No cause for onset of symptoms suggested.

The following cases either do not admit of classification under any of the preceding headings, or no information for various reasons, such as removal or wrong address, was obtained. Some were notifications of strangers brought into the town for treatment, whilst others were re-notifications:—3, 15, 38, 42, 43, 47, 51, 64, 70, 89, 100, 103, 110, 111, 120.

School Hygiene.—In my last report I detailed the various matters which came under the consideration of the Medical Officer. These have neither been added to nor taken from since that time.

The following classification represents one branch of the work, the various items of which do not call for any comment.

There was examined during the year one pupil teacher, who required form 42 to be filled up before she could commence her duties.

Twenty-three young people, who had obtained the Committee's Bursaries, were examined to ascertain their suitability for the teaching profession. They all passed the test.

Thirty-five pupil teachers were examined as to their fitness to be placed on the staff.

Seventeen teachers resuming duty after sickness of one month's duration were examined as to their fitness to resume duty.

The following children were examined for the various reasons stated:—

Children examined at the office on account of various conditions		56
Children examined at the office as to their suitability for admission to the Special School		27
Children examined before admission to the various Industrial Schools	Boys	12
	Girls	4
Children re-examined		3
Youths as to their fitness for employment as Boy Artificers in the Navy		5
Children before admission to a Blind School ...		4
Children before admission to a Deaf and Dumb Institution		4
Officers before commencing duties under the Committee		2

In addition numerous examinations were made to discover the parasite of Ringworm in cases of a doubtful character, or in which some doubt existed as to whether the disease was quite cured.

The following children were examined at the various schools, and the numbers suffering from different defects were as follows:—

Defective vision	809
Defective hearing	273
Abnormal condition of nose and throat	191
Various skin eruptions...	310
Various defects—physical and mental	103
Total	1,686

Defective Vision.—Of the 809 cases examined, 505 were found to be sufficiently serious to justify advising the parents to seek medical advice. This is about the same proportion as has been observed in other years, and, as in the past, refractive errors formed the greatest number. Acute cases were not characterised by undue frequency. As in previous years the number of instances in which spectacles were ordered but the parents pleaded that they were too poor to purchase them was fairly considerable.

Defective Hearing.—Ninety-nine out of the 273 instances of defective hearing which were brought to my notice were of a sufficiently severe character to require medical treatment. Cases of Otorrhœa were not so numerous as in previous years. Many of the old cases had been under treatment and were either relieved or cured.

Throat Cases.—Forty-four of the 191 Throat cases presented conditions which ought to have received skilled treatment, and the parents were advised accordingly. Enlarged Tonsils and adenoidal growths were the chief defects discovered.

Skin Lesion.—Although Ringworm and Impetigo were the chief conditions from which the children suffered, I think that there was a marked decline in the prevalence of the former ailment. The disease is of so objectionable a character that the fact of such a decline can only be regarded as a cause for considerable satisfaction.

Special School.—The Special School continues to do good work, but there are now no vacant places, and a few children who had been passed as suitable for admission had to wait until vacancies arose. The following visits were made to the school for the purpose of examining children as to their suitability for admission, and also for considering the progress of the children in attendance.

Date of Visit.	Number of Children.			Sent for but did not appear.	Number of Children in School examined as to progress.
	Admitted.	Rejected.	Deferred.		
2nd Feb.	...	...	...	1	4
16th May ...	...	...	...	...	7
13th June ...	...	...	...	...	every child.
9th July ...	1	1	...	...	75
6th Sept. ...	4	1	...	...	5
1st Nov. ...	2	...	1	...	33
4th Dec. ...	...	...	...	...	1
12th ,, ...	4	...	...	1	5
At office at various times	9	6	3	...	...
Total ...	20	8	4	2	...

Notification of Infectious Diseases.—The notification of cases of infectious diseases by the head masters and mistresses to the Medical Officer of Health has continued. In the year under review the number of cases so notified was 495, as against 2,377 in the previous year. The enormous difference in these totals is due to the fact that 1905 was a 'Measles' year, and to the aggregate, that disease alone contributed 1,973 cases, as against 14 last year. This very fact alone shows the extent to which this disease interferes with school work, and any action, therefore, which can be taken to limit its extension should be taken advantage of. The necessity of notification of first cases has frequently been emphasised. The number of cases of Scarlet Fever which have been notified has been fewer, viz., 29 as against 83 in 1905; the cases of Chicken-pox were practically the same, but Diphtheria increased from 33 to 78. The influence of schools on the spread of this disease was referred to in last report. In the investigation of the Osmaston cases the schools were visited and the registers inspected; in consequence, visits were made to no fewer than 138 children, and in several instances children were found to be at home suffering from mild attacks of the disease. St. Chad's School received special visits, and enquiries made at 28 houses in consequence. After visiting the Practising Schools for what looked like the beginning of a localised outbreak, enquiries were made at 13 homes. The following table gives details of the infectious cases which were reported from the various schools.

TABLE XI.—Cases of Infectious Diseases notified by the Heads of the various Schools within the Borough.

SCHOOL.	Scarlet Fever.	Measles.	Chicken-pox.	Diphtheria.	Mumps.	Whooping Cough.	Small-pox.	Various
Ashbourne Road	10	4	1	24	6	1	1	—
Brighton Road	12	2	3		17	14	—	3
Firs Estate	—	—	—	—	—	—	—	—
Gerard Street	1	1	32	8	35	—	—	9
Nuns Street	—	—	—	1	—	—	—	—
Orchard Street	—	—	—	—	—	—	—	1
Osmaston	—	—	11	6	—	9	—	—
Pear Tree Council ..	—	—	—	—	—	—	—	16
St. James' Road	1	1	—	4	1	—	—	23
Traffic Street	3		1	6	1	1	1	1
All Saints'	—	3	1	2	2	—	—	1
Canal Street	—	—	—	—	—	—	—	—
Christ Church	1	1	1	2	—	—	—	—
Curzon Street	—	—	—	—	—	—	—	—
Parliament Street ..	—	—	—	—	—	—	—	—
Pear Tree Mission ..	—	—	—	—	—	—	—	—
Practising	—	—	—	—	—	—	—	—
St. Alkmund's	—	—	2	—	—	—	—	—
St. Andrew's	—	—	—	—	—	—	—	—
St. Anne's	—	—	1	3	—	—	—	—
St. Chad's	—	—	1	13	1	—	—	42
St. Dunstan's	—	—	—	—	—	—	—	—
St. James' Church	—	—	—	—	—	—	—	—
St. John's	—	—	14	—	11	—	—	—
St. Joseph's	—		—	—	—		—	—
St. Luke's	1	1	9	2	26	10	—	2
St. Mary's	—	—	—	—	—	—	—	—
St. Paul's	—	1	—	—	—	—	—	3
St. Peter's	—	—	—	—	—	—	—	—
St. Thomas'	—	—	—	—	—	—	—	—
Trinity	—	—	14	7	2	11	—	32
Special	—	—	—	—	—	—	—	—
Municipal Secondary	—	—	—	—	—	—	—	—
Total	29	14	91	78	102	46	2	133

Disinfection of Schools.—The following schools were disinfected during the year:—Osmaston Schools, March 22nd and 23rd, in consequence of the continued presence in the schools of unrecognised cases of Diphtheria, and the following schools during the midsummer holidays:—St. Anne's Whitecross Street; St. Dunstan's, St. Andrew's, All Saints', and Christ Church Schools. The disinfection is carried out in a number of schools each year. All books are disinfected at the same time, and the process frequently results in the destruction of undesirable accumulations.

Rules for the Guidance of Teachers.—I drew up during the year a series of rules to guide teachers in the action which should be taken in the case of outbreaks of infectious disease. The particular object of the rules was to obtain uniformity of action throughout the town. These rules have been printed, and I believe, are at the present time receiving your consideration.

Housing of the Working Classes.—During the past year a certain amount of new work has been done in dealing with the poorer houses. In the past several areas have received the attention of the Sanitary Committee, and where it has appeared impossible to render the houses on these particular sites fit for human habitation they have recommended purchase of the same at a low value. This has been followed by demolition and clearance of the site, but without any re-building. By this means daylight has been let into several congested and badly constructed areas, the occupants of which have, fortunately, not been so numerous as to cause consequent overcrowding of houses in the immediate vicinity of the demolitions, nor yet at a distance. The houses which have been demolished have in most instances been of a low rental, and a danger would appear to obtain if too aggressive a policy of this character is continued. There are persons who cannot afford to pay above 3s. a week rental, and in some instances even less than this amount is the maximum limit. It is obvious that houses at such a low rental cannot be of very excellent quality, and it seems undesirable that all this class of premises should be removed if they can be brought up to what might be termed the minimum requirements of the human habitation. The absence of such low-class dwellings tends to drive people into furnished rooms, and the undue prevalence of furnished rooms and a demand in excess of the supply of houses in a district tends to increase the rentals of all the neighbouring houses. It is not a satisfactory state of affairs when small houses accommodate members of more than one family, and this, fortunately, at the present time, is not the state in Derby, neither is it desirable that there should result any increase in rentals of poorer property, but these dangers seem possibilities which may follow too extensive demolitions. The Sanitary Committee have recognised this fact, and gave instructions for a report to be made detailing the condition of every house in the Borough which is not possessed of means of through ventilation. To carry out this instruction it has been necessary first of all to ascertain the situation of these different houses, and each Inspector has made particular enquiries in his district and tabulated all such premises.

The town for inspectorial purposes is divided into three districts, A, B, and C. A line running from east to west roughly divides the town in two halves, north of which is B district, and south are the A and C districts. The line begins at the Borough Boundary on the Uttoxeter Road and proceeds the whole length of that road, along Stafford Street to its junction with Friar Gate, along Friar Gate and Wardwick to St. James' Street, then by way of the Corn Market to the Market Place and along Derwent Street to the river, following the north bank of the river to the Borough Boundary on the east side. South of this line another line proceeds, beginning where the preceding line crosses the Corn Market, it then passes along the Corn Market, St. Peter's Street and London Road as far as Litchurch Street, proceeding up Litchurch Street and then back along the Osmaston Road for a short distance to Grove Street; Grove Street is followed along its whole length to where it joins the Normanton Road. A southerly direction is then taken along that Road following Pear Tree Road and Portland Street to where Rutland Street joins it; the division line then passes up the westerly portion of Rutland Street to join St. Thomas' Road, and it then follows St. Thomas' Road along Balaclava Road to the Borough Boundary. The district to the west of this, which includes Abbey, Babington, Becket, Dale, and Normanton Wards, and a portion of Rowditch Ward, is the A district, and that part on the east side which includes Arboretum, Litchurch, Pear Tree, Castle, and Osmaston Wards, is the C district.

In the A district there were only 150 houses discovered without through ventilation, in the B district there were 685, and in the C district 314, making a total of 1,149. The B district embraces the greater part of the old town of Derby, and it is in the numerous courts which exist in the B and C districts that the larger number of back-to-back houses, and houses without through ventilation have been allowed to be built. Having obtained knowledge of their existence a systematic report on each is now being prepared, and to secure uniformity in the details which are reported upon, a special report card has been drawn up. This is of four pages, the front page including details as to situation, owner, agent, and the wording of any representation which may have been found necessary to make, and the details of notices under the Housing of the Working Classes Act. On the second page is included a general description and situation of the house, with plan. This page is ruled horizontally and vertically to render it possible to make a drawing of the scale $\frac{1}{8}$ inch with ease. The following details are contained on the other two pages:—Condition of external walls, roof, spoutings and yard, provision of damp course or not, nature of water supply, and sanitary conveniences and drainage, number of occupants both over and under 15, males and females, with paragraph in which to enter a description of the provision made for food storage. Place is left for the statement of the dimensions and cubic capacity of rooms on each floor, as well as for the condition of both day-rooms and bedrooms. By means of such a card the risks of variation in the importance which may be attributed to the same object by different observers is minimised.

In this manner the following houses were inspected and reported upon during the year 1906. The action which was taken in respect of same and the position of such as were not disposed of at the time of making this report is stated in the third column.

Address of Property.	No. of houses concerned.	Action Taken.
Albion Street, 1–6 in Court 2	6	Necessary repairs inside and outside these houses effected, provision of damp-course and a new system of drainage.
Albion Street, 1–5 White Swan Yard	5	Internal and external repairs effected, damp-course provided and surface of the street in front of houses improved
Agard Street, 18	1	No. 1 in Court 6 and this house were made into one house and thus through ventilation was provided.
Agard Street, 1–5 in Court 6	5	3, 4 and 5, were closed but have since been thoroughly overhauled and rendered habitable and are now re-occupied. Necessary repairs effected at No. 2.
Agard Street, 1–6 in Court 1	6	These houses are now closed and being used as storeplaces.
Agard Street, 1–5 in Court 3	5	No action was considered necessary.
Bridge Street, Little 1–9	9	These houses have been thoroughly repaired, both internally and externally, and rendered fit for habitation.
Bridge Street, Little 10, 11 & 12	3	Externally, roof, spoutings and yard repaired. Internally, additional window in pantry and general cleansing, now new w.c.'s are in course of erection.
Bridge Street, 1–7 in Court 7	7	One house demolished and half of the remaining house absorbed by front property. New w.c.'s built and remaining houses cleansed and thoroughly repaired
Bloom Street, 1–3 in Court 3	3	These houses were rendered as habitable as this class of property can be made.

Address of Property.	No. of houses concerned.	Action taken.
Bloom Street, 1–2 in Court 4	2	Both houses closed.
Bradshaw Street, 1–4 in Court 2	4	These houses are being dealt with as part of the Hill Street area.
Brook Walk, 21	1	Internal and external repairs and damp-course inserted.
Curzon Street, 5–12 Sowter Square	8	External limewashing, defective brickwork and surface of yard all received attention.
Curzon Street, 13–20 Sowter Square	8	External walls of houses, yard in front and such repairs as were necessary in the interiors were effected.
Curzon Street, 2a–7a	6	Necessary repairs inside and outside effected and property rendered fit for habitation.
Colyear Street, 1–4 behind Wheatcroft's Yard	4	Certain alterations effected to remedy dampness and property now in occupation.
Colyear Street, 1–5 behind 14	5	Number of minor alterations effected. Property now satisfactory.
East Street, 1–4 in Court 9	4	In fairly satisfactory condition. No action for the present.
East Street, 46	1	Closed as a dwelling house. Permission to re-open as a lock-up shop after provision of suitable sanitary conveniences and cleansing granted.
East Street, 47 & 48	2	In fair condition—no action taken, except slight repairs.
East Street, 1 & 2 & 4–10 in Courts 7 & 8	9	Extensive alterations affecting ventilation, etc., and repairs and general cleansing were effected, Court opened out, all yard paved, rendering the houses satisfactory for the type.

Address of Property.	No. of houses concerned.	Action taken.
East Street, 1–5 & 8 in Court 5	6	Extensive alterations, through ventilation, and repairs and general cleansing were effected rendering the houses satisfactory for the type. New w.c.'s were built, a new system of drainage was provided, and surface of Court repaired.
Earl Street, No. 3 Do. 2 & 3 in Court 1	3	Not necessary to take any action.
Eagle Street, 1, 3, 4, 5 & 6 in Court 3	5	No action necessary in respect of these houses for the present.
Eagle Street, 55 & 56	2	
Friar Gate, 2–7 in Court 6	6	Such repairs as were necessary both internally and externally have been effected.
Hill Street, 10–18	9	This block of property has been referred to the Chief Inspector to deal with.
Liversage Street, 1 & 2 in Court 6	2	These houses had recently been repaired at considerable expense. One or two minor defects will be dealt with by notice.
Macklin Cottages, Macklin Street, 1–9	9	These houses were in a satisfactory condition.
Searl Street, 15	1	Dampness remedied, general repairs, damp-course inserted.
Searl Street, 1–6 in Court 1	6	Repairs, inside and outside, and insertion of damp-course
Searl Street, 1 & 2 in Court 2	2	General repairs inside and outside, and insertion of damp-course, and new w.c. provided.

Address of Property.	No. of houses concerned.	Action Taken.
Action in respect of the following houses is still incomplete.		
Bridge Street, 70, 72 & 74	3	Application made to postpone the repairs for a few months acceded to by Committee. A definite date has been fixed by which necessary work shall be finished.
Bridge Street, 1–5 in Court 6	5	
Bold Lane, 5 & 5a	2	Still in occupation.
Bold Lane, 2, 3, 4, 5, 6, 7, & 8, Collis' Yard	7	Closed—Final decision as to what action shall be taken not arrived at.
Eagle Street, Ct. 4, 5 houses	5	Notice recently served under H.W.C. Act to render habitable.
Kensington Street, 4 houses in Court 2	4	Closed pending decision as to what repairs are to be effected
Kensington Street, 6 & 7	2	
Kensington Street, 4 houses in Court 6	4	Time allowed to effect alterations and demolition of one house to result. Definite date fixed for necessary repairs to be completed.
Kensington Street, 4 houses in Court 5	4	No action yet taken—back to back with Court 6 in same street.
St. Michael's Lane, 1, 2, 3 & 4 in Court 3	4	Deferred taking any steps during negotiation with owner as to possible purchase of adjoining property.

It is hoped that a continuance of this work, in the manner above described, will result in an improvement in the conditions of housing, particularly of the poorer classes.

Factories and Workshops.—Practically no alteration has been made in the details of work carried out under the Factory and Workshop Act, 1901. I have, in the past, referred to the desirability of a special Inspector being appointed for this work, and I beg again to refer to the suggestion. The places where women are employed are visited and supervised by Women Inspectors, as are also the homes of the outworkers, and this branch of the work is systematically carried out. In the case of the District Inspectors, they have such a multiplicity of other duties to perform that workshop inspection is, unfortunately, only possible during periods of slackness.

The statistics appended are practically self-explanatory, and indicate the number of workshops on the Register of the Sanitary Authority, and the visits which have been made to them. In the Home Office tabulation will be found the nature of the defects, either discovered or brought to the notice of the Inspectors, and the number of the same which have received attention. The inspection of outworkers' premises requires a considerable amount of time, and, on the whole, I consider the work to be satisfactorily and efficiently performed. Some difficulty is experienced in obtaining twice a year lists of outworkers from firms employing the same, and it has been found necessary to intimate in certain cases that the requirements of the Act must be observed.

List of Workshops.

Workshops.	Trades.	Visits.
1	Aerated Water	8
1	Artificial Limbs	0
4	Basket Maker	11
1	Beer Bottler	0
3	Blacksmith	6
17	Bootmaker	27
1	Brushmaker	3
5	Cabinet Maker	3
4	Carriage Builder	4
4	Cycle Works	2
1	Drysalter	8
1	Dyer	0
1	Fruit Preserving	2
1	House Furnisher	1

Workshops.	Trades.	Visits.
1	Iron Works	0
8	Jeweller	15
7	Joiner	6
1	Leather Currier	1
1	Leather Lace Maker	3
1	Locksmith	0
1	Manufacturing Chemist	2
2	Paper Bag	0
2	Photographer	1
2	Pickling	2
1	Plaster Figure Maker	1
7	Plumber	10
2	Polisher	2
4	Saddler	3
5	Shoeing Smith	5
2	Spa Turner	1
1	Surgical Bandage Maker	1
32	Tailor	36
7	Tinsmith	30
1	Tarpaulin Maker	1
1	Teeth Manufacturer	0
1	Umbrellas	2
2	Upholsterer	12
6	Wheelwright	5
1	Window Blinds	0
144		214

Supervised by Women Inspectors.

74	Dressmakers	115
11	Dressmakers and Milliners	
1	Hosiery Makers	
3	Laundries	
1	Manufacturing Chemist	
18	Milliners	
1	Photographers	
2	Pinafore Makers	
1	Restaurant	
26	Tailors	
1	Underclothing	
Total 283		329

Compared with last year, it will be observed that the visits are fewer in number, this being due to the extra time which the Inspectors have had to devote to the supervision of houses where infectious disease exists.

1.—INSPECTIONS.

Including Inspections made by Sanitary Inspectors or Inspectors of Nuisances.

Premises.	Number of		
	Inspections.	Written Notices.	Prosecutions.
Factories (including Factory Laundries)	30	3	0
Workshops (including Workshop Laundries)	1046	62	0
Workplaces (other than Outworkers' premises included in Part 3 of this Report) ...	1	0	0
Total	1077	65	0

2.—DEFECTS FOUND.

Particulars.	Number of Defects			Number of Prosecutions.
	Found.	Remedied.	Referred to H.M. Inspector.	
Nuisances under the Public Health Acts—				
Want of cleanliness ...	14	15	0	0
Want of Ventilation ...	4	4	0	0
Overcrowding	1	1	0	0
Want of drainage of floors	0	0	0	0
Other nuisances	52	42	0	0
Sanitary accommodation—				
Insufficient	10	7	0	0
Unsuitable or defective	18	16	0	0
Not separate for sexes...	1	1	0	0
Offences under the Factory and Workshop Act—				
Illegal occupation of underground bakehouse (s. 101)	...	...	..	...
Breach of special sanitary requirements for bakehouses (ss. 97 to 100)	284	256	...	...
Other offences ... ... (Excluding offences relating to outwork which are included in Part 3 of this Report.)	...	...	...	...
Total	384	342	0	0

HOME WORK.

Lists received from employers.

	Twice in the year.		Once in the year.	
Trade.	Lists.	Outworkers.	Lists.	Outworkers.
Making wearing apparel	34	173	14	57
Making lace curtains and net ...	4	577	...	...
Surgical bandage makers	...	...	1	3
Total	38	750	15	60

No. of addresses of outworkers received from other Councils	16
,, ,, forwarded to ,,	51
No. of inspections of outworkers premises	433

Workshops on the Register (s. 131) at the end of the year.	Number.
Bakehouses	103
Boot Makers	17
Cabinet Makers	5
Dress Makers	74
Dress Makers and Milliners	11
Jewellers	8
Joiners	7
Milliners	18
Plumbers	7
Tailors	58
Tinsmiths	7
Wheelwrights	6
All others	65
Total number of workshops on Register	386

OTHER MATTERS.

	Number.
Matters notified to H.M. Inspector of Factories :—	
Failure to affix Abstract of the Factory and Workshop Act (s. 133)	0
Action taken in matters referred by H.M. Inspector as remediable under the Public Health Acts, but not under the Factory and Workshop Act (s. 5) :—	
Notified by H.M. Inspector	14
Reports (of action taken) sent to H.M. Inspector	9
Other	0
Underground Bakehouses (s. 101) : —	
Certificates granted during the year	0
In use at the end of the year	1

Work of Women Inspectors and Nurse.—The work in this particular department has increased to such an extent that the Committee decided to appoint an additional Woman Inspector. The continuity of the work has been interfered with to some extent owing to the senior Inspector having left to take up duties elsewhere.

The following tabulation sufficiently indicates the nature of the work, the complete details of which have received attention in previous reports.

Visits to houses where a birth has been registered ...	2,949
Number of re-visits in the matter of infant feeding ...	318
Enquiries respecting the deaths of infants	220
Visits made to houses where one or other of the non-notifiable infectious diseases has been known to exist ...	305
Inspection of workshops	115
Inspection of outworkers' premises	445
Special visits to various places	186
Visits without result, owing to change of address or absence of the occupiers	995
Total...	5,533

The Nurse has made the following visits:—

For the purpose of giving advice in reference to infant rearing	1,349
Visits to houses in which cases of Phthisis have been reported	513
School cases visited	41
Total ...	1,903

Offensive Trades.—The following are the chief offensive trades which are carried on in the Borough:—

Bone Boiling	1	Soap Boiling	1
Gut Scraping	1	Tallow Melting	1
Hide, Skin Mart ..	2	Tripe Boiling	7
Leather Dressing ..	1	Varnish Making ..	1
Leather Tanning ..	1		—
Parchment Works ..	1	Total	18
Skin Curing	1		

These places have been regularly visited and notices served to remedy such defects as were discovered, all of which were of a minor character.

General Inspectorial Work.—The supervision of common lodging houses, tenement houses, and slaughter houses, has been carried out by two special inspectors, appointed for this purpose. Full particulars of the visits, infringements of the bye-laws, sanitary defects which were discovered, and the results of action to remedy same, are set out in the tabulation supplied to me by the Chief Inspector of Nuisances. In this same tabulation will be found the details of visits to places where ice-cream is prepared for sale, and the supervision of bakehouses has been referred to under the heading of "Factories and Workshops."

Water Supply—During the year, the water supply of the Borough has been occasionally submitted to analysis. It has not been found necessary to adversely criticise the water supplied. Several wells have been closed in the Alvaston area, following analyses of the water by the Medical Officer of Health.

Meteorological Return.—I have to thank Mr. W. G. Carnt, late Secretary-Superintendent of the Derbyshire Royal Infirmary, for the information from which the subjoined table has been compiled. The highest mean shade temperatures were registered during the month of August. The greatest variation between the maximum and minimum temperature was observed during the months of April and September. February was the coldest month, and most rain fell during the month of October. The greatest number of rainy days was observed in October, January, and December. The heaviest amount of rainfall in twenty-four hours was on the 2nd and 18 October, when .83 inch was registered on each day. The nearest approach to this was on the 5th January, when .67 inch fell:—

TABLE XI.—Showing the means of the Meteorological Observations taken at the Derbyshire Royal Infirmary for the 12 months ended 31st December, 1906.

1906.	THERMOMETERS.				Rainfall in inches.		Greatest fall in 24 hours.		No. of Rainy days, 1906.
	Dry Bulb.	Wet Bulb.	Shade Temperature.		Infirmary Grounds 1906.	1905.	Amount in inches.	Date.	
			Maximum.	Minimum.					
January ...	40·2	39·0	46·1	36·1	3·52	1·04	·67	5th.	24
February...	36·7	34·9	43·0	32·2	2·99	·83	·82	27th.	18
March	40·9	39·0	47·9	34·7	1·83	2·93	·35	11th.	20
April ...	46·2	41·6	55·0	35·9	·64	1·64	·24	23rd.	9
May ...	52·1	48·5	58.7	44·8	1·52	·46	·23	20th.	20
June ...	58·8	54·4	66·6	49·4	2·08	2·28	·55	28th.	11
July ...	63·3	57·6	71·4	52·6	·12	·93	·63	11th and 18th.	12
August	64·2	60·7	73·1	54·6	1·03	3·24	·33	24th.	13
September	57·6	53·4	67·3	48·1	1·00	1·37	·41	14th.	7
October ...	51·7	49·9	57·4	45·9	5·32	1·53	·83	2nd and 18th.	26
November	45·4	43·8	49·7	40·4	2·90	2·62	·66	19th.	20
December	37·0	36·0	41·7	32·7	3·10	·69	·60	25th.	24

SANITARY INSPECTOR'S REPORT, 1906.

Ford Street Stables.

(Administered under the direction of the Plant & Stores Committee).

Number of Horses at last report ...	67	
Bought during the year	3	
	—	70
Disposed of	8	
	—	
Horses remaining at Ford Street		62
Inspector's Department		42
Surveyor's Department		15
Police and Fire Department		5

Privy and Ashpit Cleansing.

Night-work.—	Privies Cleansed	6,175
,,	Ashpits Cleansed	3,530
,,	Privy Cesspools Cleansed	576
Day-work.—	Dry Ashpits Cleansed	695
		10,976

Refuse Collected.

Night-work.—	Loads	(Excreta only)	5,671
,,	,,	Ashes and Excreta	3,410
,,	,,	Ashes only	3,088
Day-work.—	,,	Ashes	24,746
			36,915

Refuse Disposal.

Disposed of as Manure:—By Boats 361 loads.

By Customers' own carts, 341 tons, 8 cwts.

Delivered to Farmers from pits, 3,789 cart loads.

Deposited on tips, 2,340 cart loads.

Burned in the Destructors, 27,268 tons.

Extracted from Refuse and sold, 8 tons, 17 cwts., 2 qrs. of Scrap Iron, and 1 ton, 17 cwt., 1 qr. Bones.

Refuse Collection and Disposal, Cost, calculated on Wages only.

	Average No. of Men including hired.	Loads.				Wages only, including hired Men.		
Day	45.69	24.746	@	2/2.60 each	=	£2,743	7	10½
Night	31.81	12,169	@	3/3.15 each	=	£1,985	9	4
Chester Depôt	43	32,152	@	1/7.14 each	=	£2,564	8	5

Bakehouses.

Occupied at 1st January	107	
Empty	44	
	—	151
Demolished	4	
Converted to Factory	1	
Permanently closed	6	
	—	11
		—
		140
New Houses opened		6
Occupied Houses at end of year	103	
Unoccupied	43	
	—	—
Total Bakehouses in the Borough		146
Empty Bakehouses re-occupied	4	
Visits paid to occupied Bakehouses... ...	576	
Visits paid to unoccupied Bakehouses ...	132	
	—	
	708	

Sanitary Work.

Defects found, 284; Remedied, 256.

Notices given, 97 verbal, and 37 written.

Nuisances abated, 256.

Nuisances covered by three written and three verbal notices are not yet cleared.

Canal Boats.

Annual Report for the Year 1906, in accordance with Section 3, Canal Boats Acts, 1884.

1. Inspector and Salary, Chief Inspector and Assistant. No salary allocated.

Address: Sanitary Offices, Ford Street, Derby.

2. Boats inspected, 57. Visits to Canal, 119.

3. Infringements of Acts and Regulations.

a.—Registration	0
b.—Change of Master	0
c.—No Certificate on Board	0
d.—Absence of Marking	0
e.—Overcrowding	1
f.—Separation of Sexes	0
g.—Cleanliness	0
h.—Ventilation	0
i.—Painting	0
j.—Provision of Water Casks	1
k.—Removal of Bilge Water	0
l.—Notification of Infectious Disease	0
m.—Admittance of Inspector	0
n.—Boats found in Bad Repair	0

4 Legal proceedings taken, none.

5. Other steps taken, two caution forms and several letters sent. One boat found with defective certificate, number of occupants not stated. Registration Authority communicated with and defect rectified.

6. Cases of infectious diseases dealt with, none.

7. Detention of boats for cleansing and disinfection, none.

8. Number of boats on Derby Register, end of Year, 1906, 31.

9. Number of boats registered during the year 1906, 0.

Common Lodging Houses.

On Register at beginning of 1906	19
Closed during 1906 (29, Morledge)..	1
Leaving on Register	18
Visits paid	1,067
Notices given, verbal and written	167
Complaints remedied	182

Houses Let in Lodgings.

On Register at beginning of 1906	41
Added during 1906	8
Closed	6
Leaving on Register	43
Visits paid	2,414
Notices served	240
Contraventions of Bye-laws remedied	258

The chief items dealt with in both classes of Lodging Houses have been cleanliness of premises, bedding, and fittings, and ventilation of rooms.

Diseases of Animals Acts.

The various Acts, Orders, and Regulations made hereunder, have been administered under the direction of the Markets Committee, Inspector Turner acting as my assistant. At 31st December, 1905, seven healthy pigs were detained on premises which had been infected with Swine Fever, but as they did not contract the disease, the place was duly declared free and the animals liberated.

Only one case of Swine Fever was reported, and although sufficiently suspicious, was found on examination not to be Swine Fever.

Notwithstanding the fact that we have been free from this disease, in January of the year the Borough was included as part of a large area for purposes of the Swine Fever Orders, and the Town and Markets were placed under special restrictions..

For Swine from Markets or Sale Yards, for slaughter in outside districts, 450 licences were issued, each of which had to be duplicated and posted to the receiving authority. For swine to be slaughtered within the Borough 815 receiving licences were issued.

Animals for slaughter had to be killed on the premises to which they were consigned, a provision which necessitated many visits to see that the Order was complied with.

Special Receiving licences (52) were issued controlling 653 store swine admitted from outside the area under special restrictions. These animals had to be kept under constant supervision to see that no disease had been introduced. Orders relating to the cleansing and limewashing of pig dealers' premises are still in force, and weekly supervision of these has been maintained.

Dairies, Cowsheds and Milkshops.

Registered as Cowkeepers :—

On Register, January, 1906	28	
Removed from Register	3	
New Registration	1	
Leaving on Register		26

Visits, 130.

Registered as Dairymen and Purveyors :—

On Register, January, 1906	360	
New Registrations	76	
Removed from Register	43	
Leaving on Register		393

Visits, 1,841.

Purveyors Registered from outside Borough Boundary :—

On Register, January, 1906	140	
New Registrations...	5	
Total on Register		145

Notices served, 242.

Nuisances abated, 340.

Nuisances Dealt With.

Preliminary Notices to the number of 2,737 were served for the abatement of a variety of nuisances, and the action taken thereon brought to light many defects not suspected on first inspection. The work done in the application of remedies is set forth in detail in the table "Nuisances Abated," where it will be seen that every notice covered on an average from four to five separate nuisances.

In addition to the above, nine legal notices have been served, seven of which have received attention, one is now in hand, and one is likely to result in a prosecution.

In carrying out this large amount of remedial work every possible care is taken by constant supervision and the application of tests, to secure sound construction, with a reasonable hope that the nuisances dealt with are not likely to recur.

The item relating to Factories and Workshops includes only remedies applied in consequence of complaints received from His Majesty's Inspector of Factories. Other nuisances have been dealt with, as per details supplied to the Medical Officer of Health, but no regular and systematic inspection of Workshops can be undertaken without a special Inspector to devote his chief attention to this work.

NUISANCES ABATED.

		A	B	C	X	Total.
Ashpits ...	Demolished	96	44	176	...	316
Drains ...	Cleansed and Repaired (or Soil Pipes)	164	406	253	...	823
	Disconnected from Sinks	120	6	45	...	171
	Provided (or Soil Pipes)	377	183	398	...	958
	Re-laid and New	500	373	525	...	1398
	Removed from Inside Houses ...	127	30	30	...	187
	Cut-off from Streams	...	...	3	...	3
	Soil Pipes Removed from Inside Houses	24	5	...	...	29
	Brick Replaced by Salt-glazed Pipes	231	148	1	...	380
	Inlets Trapped and Inspection Chambers Provided or Repaired ...	767	576	765	..	2108
	Waste Pipes Repaired, Renewed, &c.	22	39	18	...	79
	Soil Pipes and Drains Ventilated ...	213	103	157	...	473
Houses ...	Cleansed	31	19	49	...	99
	Cellars Cleansed and Limewashed ...	15	17	21	...	53
	Damp Coursed and made Dry ...	12	12	25	...	49
	Overcrowding Prevented	...	4	1	...	5
	Ash Bins provided	180	122	336	...	638
	Dangerous Walls or Buildings Repaired	12	1	...	...	13
	Paving of Yards and Passages ,,	186	94	355		635
	Roofs, Floors, &c. ... ,,	41	23	58	...	122
	Spouting Repaired, Disconnected or Provided	98	145	119	...	362
	Rooms Ventilated	..	...	5	...	5
Privies ..	Cleansed and Repaired, or new Tubs Provided	312	288	283	...	883
	Converted to W.C.'s	179	146	298	...	623
	Demolished	...	4	4	...	8
Urinals ...	Erected	1	3	...	...	4
	Removed	..	3	1	..	4
	Repaired	1	...	1	...	2
Water ...	Soft Water Tanks Cleansed and Repaired and Pumps Repaired ...	42	24	11	..	77
	Disused Wells Filled in	31	10	25	...	66
	Provided with Town Water (Houses)	1	6	10	...	17
	Covers of Tanks or Wells Repaired ...	3	...	...	...	3
W.C.'s ...	Cleansed or Repaired	21	5	15	...	41
	Flushing Water Laid on	3	1	...	...	4
	Additional Provided	7	12	9	...	28
	Fittings Repaired	45	36	19	...	100
Bakehouses,	Contraventions Remedied ...	...	...	...	256	256
Common Lodging-houses	,, ,, ...	...	...	...	182	182
Dairies, Cowsheds and Milkshops	,, ,, ...	...	...	...	340	340
Factories and Workshops	,, ,, ...	4	3	9	...	16
Houses Let in Lodgings	,, ,, ...	...	...	...	258	258
Ice Cream Places	,, ,, ...	...	...	...	2	2
Slaughter Houses	,, ,, ...	...	...	1	...	1
Smoke Nuisances	,, ,, ...	...	1	1	...	2
Accumulations of Manure, &c., removed, and Premises Cleansed ...	... ...	16	12	16	...	44
Fowls or Animals removed ...	... ...	6	4	6	...	16
Manure Pits and Cesspools removed	... ...	9	23	5	...	37
Stagnant Water removed ...	... ...	4	3	12	...	19
Stables Drained or Paved ...	.. ..	16	5	3	...	24
Manure Pits Provided ...	... ...	...	2	...	...	2
		3917	2941	4069	1038	11965

Ice Cream Premises

Number of places on books at end of 1905 ...	248
Added during 1906	14
	262
Struck off list	12
On books at end of 1906	250

Two notices for cleansing of premises served, and complied with.

Visits of inspection, 313.

Police Court Proceedings.

No. of Cases	Offence.	Result.	Total Costs.		
			£	s.	d.
2	Selling Milk deficient in fat ...	Fined 5s. and Costs...	2	7	0
2	,, Adulterated Rum (*d*) ...	,, 10s. and Costs	2	17	0
2	,, ,, Milk ...	Dismissed	...		
1	,, ,, ,, ...	Fined 10s. and Costs	1	15	0
1	,, Milk deficient in fat ...	,, 10s. and Costs	0	19	6
1	,, Margarine as Butter ...	,, 20s. and Costs	3	7	6
1	Delivering Margarine in unmarked wrapper	,, 20s. and Costs			
1	Exposing Blown Veal for Sale	,, 40s and Costs	2	7	6
1	Blowing Veal	,, 20s. and Costs	1	7	6
1	,, ,, ...	Withdrawn	...		
1	Sending diseased sow into Cattle Market	Fined 40s. and Costs	2	9	6
1	Moving Swine without first obtaining Licence	,, 5s. and Costs...	0	12	6

(*d*) See note under table "Food and Drugs Acts."

Registered Slaughter Houses.

At end of year 1906 :—

In the hands of private holders	50
Corporation houses let to private tenants ...	17
Corporation houses used as public	3
Standing empty, private	2
Standing empty, Corporation	1
	73

Visits of inspection for the year, 7,016.

One private slaughter house licence lapsed.

One Corporation slaughter house used as fat dressing establishment.

UNSOUND FOOD

Condemned and Destroyed.

13 Seives Blackberries.
1870 lbs. Beef.
54 lbs. Beast's Kidneys.
283 lbs. Cat Fish.
1230½lbs. Cod Fish.
1 Calf.
98 lbs. Codling.
7 Boxes Chickens.
44 Chickens
2 Ducks.
16 Guinea Fowls.
392 lbs. Halibut.
378 lbs. Haddocks.
238 lbs. Hog's Kidneys.
2550 lbs. Liver, Lungs, etc.
40 lbs. Lamb.
2933 lbs. Mussells.
238 lbs. Mutton.
140 lbs. Mackerel.
55 lbs. Ox Tails.
800 Oysters.
72 lbs. Prawns.
58 lbs. Plaice.
210 lbs. Pork.
1089 Rabbits.
336 lbs. Sprats.
32 lbs. Sheep's Kidneys.
4 Cases Sheep's Hearts.
262 lbs. Shrimps.
45 lbs. Veal.
80 lbs. Whelks.
28 lbs. Yeast.

Account has again been kept of the number of animals slaughtered for human food, and found to be suffering from tuberculosis. Out of the total bovine animals slaughtered, and coming under official inspection, 81 were so diseased; and it is worthy of special note that 64 of these, or 79.01 per cent. were cows, the majority of which had quite recently been giving milk. The main point I wish to emphasise in this connection is, that as cows suffer from tubercular disease in far greater proportion than other animals, there is an urgent necessity for improving the sanitation of cowsheds and farm buildings, in order to check at its source, the production of this widespread and dangerous disease.

Food and Drugs Acts.

Samples submitted to the Borough Analyst (Mr. Otto Hehner).

Samples.	Article.	Genuine.	Adulterated.
53	Milk	49 (*a*)	4 (*b*)
37	Butter	34	3 (*c*)
4	Rum	3	1 (*d*)
3	Gin	3	0
5	Whiskey	3	2 (*e*)
4	Brandy	4	0
4	Ground Almonds	4	0
110		100	10

Particulars of prosecutions are given in the table "Police Court Proceedings," but further comment is required in regard to some of the items.

(*a*) Two samples returned as genuine contained boric preservative, 3.4 grains and 2 grains per pint.

(*b*) Two cases, with 17 parts and 6 parts of added water respectively, the latter being confirmed by reference to Somerset House, were submitted to the Court, yet no conviction was granted in either. Proceedings were withdrawn in a case of 4 per cent. of added water.

(*c*) Two of these were clear cases of selling margarine as butter, and prosecutions were taken under both the Food and Drugs Act and the Margarine Act, but the results cannot be regarded as satisfactory, or any deterrent to the repetition of such dealing. The third case, in which proceedings were not taken, was reported as containing *a small amount* of margarine.

(*d*) This was not a serious case of adulteration, but owing to the circumstances connected with the purchase it became of considerable importance. The local Justices convicted, and their conviction was appealed against by the defendant, Dawes, on the ground that a printed notice hung in the house was a sufficient intimation to the purchaser that he was not getting a genuine article. The case created considerable interest, and was thus described in the public Press:—

"Appeal: Dawes v. Wilkinson. Inadequate 'Notice' Conviction confirmed. Important decision." The wording of the Notice ran:—

"All spirits sold in this establishment are of the same quality and strength as heretofore, but, in order to comply with the Food and Drugs Acts, will not be of any guaranteed strength. Issued by the authority of the Derby and District Licensed Victuallers' Association." On behalf of your Committee it was contended that the notice did not indicate that the spirit had been reduced below the legal standard, and that to simply say the spirits would not be of any guaranteed strength, raised a contention that would equally apply in the case of other articles on sale.

The Appeal was heard in the King's Bench Division, on 5th November, by the Lord Chief Justice, and Justices Ridley and Darling, when it was dismissed with costs, Justice Darling dissenting. The Lord Chief Justice in delivering judgment said:—"As long as spirits were allowed by law to be sold, the purchaser was entitled to as much protection as the purchaser of any other article. The strength of the spirit was one thing, and the dilution of it another . . Was it sufficient to put up a notice that the spirits were not of any guaranteed strength? They would be opening the door to a dangerous practice if they held that the use of the words of this notice 'not of any guaranteed strength' included dilution to more than 25 degrees under proof."

(*c*) The adulteration in these samples was light, 2.0 parts, and 2.1 parts of added water respectively, so no proceedings were taken.

Report re Offensive Trades.

Visits paid by Special Inspector	85
Number of such Trades established in the Borough ...	18
Written notice served	1

The Tallow Melting Works in St. Michael's Lane, have been closed since January, 1906, so the right to use these premises for such a purpose lapses.

W. WILKINSON,
Chief Sanitary Inspector.

BOROUGH SURVEYOR'S REPORT, 1906.

Sewers Cleaned Out during 1906.

	Loads		Loads
London Road	23	Kedleston Road	1
Nottingham Road	5	Russell Street	1
St. Mark's Road	4	Park Street	4
Cowsley Road	1	Slack Lane	3
Dickinson Street	2	Midland Road	15
Porter Road	1	Francis Street	4
Parcel Terrace	1	North Street	13
Graham Street	4	Roman Road	2
Balfour Road	4	New Chester	2
Colyear Street	4	St. Peter's Churchyard	2
Cotton Lane	1	King Street	1
Vernon Street	2	Duke Street	1
Sadler Gate Bridge	1	Wood Street	6
Willow Row	3		
Markeaton Street	2		
Osmaston Road	3	Total	121
Stockbrook Street	5		

New Sewers Laid during 1906.

North Street	15″
Osmaston Road	9″

Water Used during 1906.

	Gallons.
Sewer Flushing	6,356,927
Court Flushing	258,750
Street Watering	12,231,600
Steam Rolling	1,344,600
Cabstands, Bridges, and Woodpaving	196,000
Footways	8,400
Total	20,396,277

Disinfectant Powder used, two tons.

Disinfectant Fluid used, 960 gallons.

Manholes Cleaned Out during 1906.

	Loads.		Loads.
William Street	1	Carrington Street	3
Leaper Street	3	Nottingham Road	4
Northumberland Street	2	Traffic Street	2
Curzon Street	2	North Street	1
London Road	32	Westbury Street	5
Mundy Street	3	Mount Street	1
Arboretum Street	7	Slack Lane	1
Boundary Road	2		
Willow Row	2		
Shaw Street	3	Total	78
Liversage Street	4		

River Derwent Dredging, 400 tons.

Markeaton Brook Cleaning, 220 tons.

Manholes Constructed during 1906.

Arboretum Street	2	Melbourne Street	2
Abbey Street	1	Northumberland Street	1
Agard Street	2	North Street	2
Chapel Lane	1	New Chester Street	2
Church Lane	1	Osmaston Road	2
Carrington Street	1	Shaw Street	2
Cæsar Street	1	Stockbrook Street	1
Dickinson Street	2	St. Paul's Road	1
Fox Street	2	Traffic Street	2
Liversage Street	1	William Street	1
Mundy Street	1	Willow Row	2
Macklin Street	1	Westbury Street	1
Mansfield Street	2	Total	38
Mansfield Road	1		

JOHN WARD,
Borough Surveyor.

Appendix I.

COUNTY BOROUGH OF DERBY.

Vital Statistics of Whole District during 1906 and previous years.

Year.	Population estimated to middle of each Year.	Births.		Total Deaths Registered in the District.				Total Deaths in Public Institutions.	Deaths of Non-residents registered in Public Institutions in District.	Deaths of Residents registered in Public Institutions beyond Dist.	Nett Deaths at all ages belonging to the Dist.	
				Under One Year of Age.		At all Ages.						
		Number.	Rate.*	Number.	Rate per 1,000 Births Registered.	Number.	*Rate.				Number.	*Rate.
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.
1896.	100,087	2,834	28·4	426	150	1,620	16·2	234	43	No record	1,577	15·8
1897.	101,262	2,803	27·7	470	168	1,720	17·0	286	64		1,656	16·4
1898.	102,448	2,860	28·0	481	169	1,830	17·9	197	74	...	1,756	17·2
1899.	103,649	2,984	28·8	488	163	1,856	18·0	310	81	nil.	1,775	17·2
1900.	104,684	2,900	27·7	504	173	1,932	18·5	342	78	...	1,854	17·7
1901.	106,076	2,939	27·8	455	155	1,673	15·8	304	75	...	1,598	15·1
1902.	116,869	3,326	28·5	417	126	1,698	14·6	290	59	...	1,639	14·1
1903.	118,707	3,215	27·1	411	128	1,671	14·1	309	75	...	1,596	13·5
1904.	120,449	3,282	27·3	467	143	1,905	15·9	346	81	...	1,824	15·2
1905.	122,207	3,108	25·5	471	152	1,823	15·0	336	79	2	1,746	14·3
Averages for years 1896-1905.	109,644	3,026	27·6	460	153	1,773	16·3	296	71		1,702	15·6
1906.	123,981	3,103	25·1	359	116	1,829	14·7	370	99	3	1,733	14·0

* Rates in Columns 4, 8, and 13 calculated per 1,000 of estimated population.

Note.—The deaths to be included in Column 7 of this Table are the whole of those registered during the year as having actually occurred within the district or division. The deaths to be included in Column 12 are the number in Column 7, corrected by the subtraction of the number in Column 10 and the addition of the number in Column 11.

By the term "Non-residents" is meant persons brought into the district on account of sickness or infirmity, and dying in public institutions there; and by the term "Residents" is meant persons who have been taken out of the district on account of sickness or infirmity, and have died in public institutions elsewhere.

Area of District in acres (exclusive of area covered by water) 5,272 acres.

Total population at all ages	114,848	At Census of 1901.
Number of inhabited houses	24,851	
Average number of persons per house	4·7	

Appendix II.

Vital Statistics of separate Localities in 1906 and previous years.

Names of Localities.	Whole District.				Abbey Ward.				Arboretum Ward.				Babington Ward.			
Year.	Population estimated to middle of each year.	Births registered.	Deaths at all Ages.	Deaths under 1 year.	Population estimated to middle of each year.	Births registered.	Deaths at all Ages.	Deaths under 1 year.	Population estimated to middle of each year.	Births registered.	Deaths at all Ages.	Deaths under 1 year.	Population estimated to middle of each year.	Births registered.	Deaths at all Ages.	Deaths under 1 year.
	a.	b.	c.	d.	a.	b.	c.	d.	a	b.	c.	d.	a.	b.	c.	d.
1896	100,087	2,834	1,577	426	...	...	...	...	...	...	...	...	...	...	...	...
1897	101,262	2,803	1,656	470	...	...	...	...	...	...	...	...	...	...	...	...
1898	102,448	2.860	1.756	480	...	...	...	...	...	...	263	93	...	...	199	50
1899	103,649	2.984	1,775	484	...	...	...	...	...	...	301	88	...	...	169	35
1900	104,684	2,900	1,854	503	...	...	...	...	...	...	311	91	...	...	185	38
1901	106,076	2,939	1.598	451	...	...	...	...	...	579	266	78	...	201	159	41
1902	116,869	3.326	1,639	417	8901	312	142	50	9045	230	110	25	8596	160	103	20
1903	118.707	3,215	1.596	406	9040	317	128	39	9186	188	110	30	8730	149	110	19
1904	120,449	3,282	1,824	467	9175	318	147	34	9324	206	104	22	8861	159	109	19
1905	122,207	3,108	1,746	467	9306	299	140	43	9459	199	120	24	8988	146	105	18
Averages of Years 1896 to 1905.	109,644	3,026	1,702	458	...	...	...	...	...	...	...	...	...	...	...	...
1906	123.981	3,103	1.733	351	9442	279	127	27	9596	182	99	18	9119	166	145	20

Names of Localities.	Becket Ward.				Bridge Ward.				Castle Ward.				Dale Ward.			
Year.	Population estimated to middle of each year.	Births registered.	Deaths at all Ages.	Deaths under 1 year.	Population estimated to middle of each year.	Births registered.	Deaths at all Ages.	Deaths under 1 year.	Population estimated to middle of each year.	Births registered.	Deaths at all Ages.	Deaths under 1 year.	Population estimated to middle of each year.	Births registered.	Deaths at all Ages.	Deaths under 1 year.
	a.	b.	c.	d.	a.	b.	c.	d.	a.	b.	c.	d.	a.	b.	c.	d.
1896	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1897	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1898	...	...	310	90	...	...	...	...	...	...	195	62	...	...	...	...
1899	...	...	334	88	...	...	...	...	..	...	204	47	...	...	...	...
1900	...	...	388	120	...	...	...	...	...	...	221	65	...	...	...	...
1901	...	607	296	88	...	...	...	...	...	310	168	49	...	...	...	...
1902	7425	165	110	17	5170	97	70	16	7924	257	149	39	4868	170	67	19
1903	7542	178	114	25	5250	122	61	13	8048	247	157	43	4944	183	72	22
1904	7655	156	97	22	5329	97	51	6	8132	264	169	56	5019	189	85	21
1905	7765	164	100	29	5407	113	101	27	8285	240	195	58	5092	200	82	22
Averages of Years 1896 to 1905.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1906	7877	150	88	22	5485	122	70	8	8405	226	143	36	5166	199	81	15

Names of Localities.	Derwent Ward.				Friar Gate Ward.				King's Mead Ward.				Litchurch Ward.			
Year.	Population estimated to middle of each year.	Births registered.	Deaths at all Ages.	Deaths under 1 year.	Population estimated to middle of each year.	Births registered.	Deaths at all Ages.	Deaths under 1 year.	Population estimated to middle of each year.	Births registered.	Deaths at all Ages.	Deaths under 1 year.	Population estimated to middle of each year.	Births registered.	Deaths at all Ages.	Deaths under 1 year.
	a.	b.	c.	d.	a	b.	c.	d	a.	b.	c.	d.	a.	b.	c.	d.
1896	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1897	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1898	...	...	129	44	...	...	166	41	...	...	279	82	...		92	18
1899	...	...	134	45	...	...	218	59	...	...	301	87	..	...	114	35
1900	...	...	138	42	...	...	196	34	...	...	284	74	...	..	131	39
1901	...	230	133	27	...	391	169	45	...	392	295	93	...	139	112	30
1902	5020	165	66	22	8667	255	94	22	7188	218	177	46	8623	183	109	20
1903	5099	157	67	20	8802	235	109	30	7317	174	159	36	8754	161	97	13
1904	5176	168	91	26	8933	216	121	32	7426	213	169	43	8886	168	113	23
1905	5249	154	73	20	9061	198	118	35	7517	179	138	33	9017	145	104	15
Averages of Years 1896 to 1905.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1906	5325	131	76	16	9193	204	95	13	7626	173	146	33	9148	182	141	28

Names of Localities.	Markeaton Ward.				Normanton Ward.				Osmaston Ward.				Pear Tree Ward.			
Year.	Population estimated to middle of each year.	Births registered.	Deaths at all Ages.	Deaths under 1 year.	Population estimated to middle of each year.	Births registered.	Deaths at all Ages.	Deaths under 1 year.	Population estimated to middle of each year.	Births registered.	Deaths at all Ages.	Deaths under 1 year.	Population estimated to middle of each year.	Births registered.	Deaths at all Ages.	Deaths under 1 year.
	a.	b.	c.	d.	a	b.	c.	d.	a.	b.	c.	d.	a.	b.	c.	d.
1896	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1897	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1898	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1899	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1900	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1901	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1902	7327	239	104	27	7351	266	83	23	5525	188	60	23	7053	222	93	26
1903	7441	243	96	27	7466	250	105	36	5611	213	55	10	7163	207	76	22
1904	7552	237	136	39	7578	280	104	30	5695	203	88	27	7270	219	102	33
1905	7661	204	114	32	7688	218	89	24	5777	204	53	23	7374	250	97	30
Averages of Years 1896 to 1905.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1906	7773	230	135	34	7800	215	86	14	5861	224	85	25	7480	274	109	22

Names of Localities.	Rowditch Ward.				Deaths in Institutions not relegated to Wards.				Strangers.	
Year.	Population estimated to middle of each year.	Births registered.	Deaths at all Ages.	Deaths under 1 year.	Population estimated to middle of each year.	Births registered.	Deaths at all Ages.	Deaths under 1 year.	Deaths at all Ages.	Deaths under 1 year.
	a.	b.	c.	d.	a	b.	c.	d.	c.	d.
1896	...	...	...	...	...	...	...	...	...	...
1897	...	...	...	...	...	...	...	...	...	...
1898	...	...	...	...	...	...	123	...	...	4
1899	...	...	...	...	...	...	...	...	...	1
1900	...	...	...	...	...	...	...	...	...	1
1901	...	...	...	...	...	...	...	...	...	1
1902	8186	199	102	22	...	...	...	...	59	...
1903	8314	191	80	21	...	...	...	...	75	5
1904	8438	189	135	34	...	...	...	...	81	...
1905	8561	201	117	34	...	...	...	...	79	4
Averages of Years 1896 to 1905.	...	...	...	...	...	...	...	...	...	...
1906	8685	146	107	23	...	...	...	...	99	5

Note re-arrangement of Ward Boundaries for 1902. It is impossible to group the old arrangement so as to render them statistically comparable with the new arrangement.